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TREATMENT BY HYPNOTISM AND SUGGESTION

TREATMENT BY HYPNOTISM AND SUGGESTION

OR, PSYCHO-THERAPEUTICS

BY

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SEVENTH EDITION

WITH A CHAPTER ON TREATMENT BY SUGGESTION DURING THE WAR BY

A. PERCY ALLAN, M.D., B.S. LOND.

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TO THE MEMORY OF

DR. LIÉBEAULT,

OF NANCY

IN ADMIRATION OF HIS GENIUS, THIS BOOK,

THE OUTCOME OF HIS TEACHING,

IS GRATEFULLY DEDICATED

PREFACE TO THE SEVENTH EDITION

RATHER unexpectedly I am informed that the sixth edition is exhausted, and am asked to bring out a seventh. This I have done, adding a chapter by my friend Dr. Percy Allan, of Croydon.

I have left out a good deal of matter which has become of general acceptance, and some of the cases previously reported; also, I have added a few new cases and some experiences connected with the Great War.

Continuous practice of the treatment for over forty years has confirmed the opinions set forth in this book, and it is with great satisfaction I learn that the ideas therein expressed are now so widely held.

I have left out the chapter kindly contributed by Dr. Constance Long on psycho-analysis, as we felt it is now a recognized and separate treatment with its own literature. This does not mean that I have ceased to sympathize with this form of therapy; we are living in an age of enlightenment, and must not neglect to make use of any form of advanced scientific thought. Dr. Constance Long's recent volume, 'Collected Papers on the Psychology of Phantasy' (Baillière, Tindall and Cox, 1920), very ably demonstrates the theory and practice of psycho-analysis.

INGARSBY,
EASTBOURNE,
January, 1921.

PREFACE TO THE FIRST EDITION

In bringing forward this little book on Treatment by Suggestion, I feel that, though I must crave indulgence for the shortcomings of the writer, no apology is necessary for introducing so important a subject.

The Nancy treatment has during the last few years attracted so much interest among men of science and members of the medical profession on the Continent that it seems strange the knowledge of it in this country is almost entirely theoretical. The system of psycho-therapeutics has so far attained its fullest development in Holland, where in every large town it is followed by at least one well-qualified practitioner; while in Germany, Russia, Sweden, and, indeed, every European country, its position is secured by the support of leading physicians, and by the success attending their practice. In every country, I believe, the introduction of the system was at first opposed by persons who feared the popularization of so potent an agent; but as the beneficial results of the treatment became manifest opposition decreased, and has now almost died out. This is doubtless due chiefly to the fact that the treatment has not been allowed to fall into the hands of ignorant and unqualified practitioners, but has been accepted by men of high character and professional repute. The dangers of hypnotism have been proved chimerical: in proper hands no undesirable medical results can occur through its practice, and there

is, I believe, hardly one authenticated case of its being used for a criminal purpose in the countries where it is most frequently employed by medical men. More than this can hardly be said for any system of medical treatment.

But while maintaining that hypnotism has been very little used for criminal purposes, we should be foolish to blink the fact that it *might* conceivably, under certain circumstances, be a dangerous weapon in unprincipled hands, and that its injudicious use *might* lead to physical and mental ills; but such evil results are in a very great measure preventable. Wherever hypnotism has been largely adopted as a valuable aid in the treatment of disease, its importance has been formally recognized, and its employment by charlatans, either as a toy at public exhibitions or in unauthorized medical practice, has been prohibited by law.

Medical electricity is only now emerging from the limbo of quackery, because for years the medical profession allowed it to be exploited by ' professors,' who used it as a universal remedy in all cases, suitable and unsuitable. The Nancy system has been successful on the Continent because it is practised there by qualified physicians and surgeons, whose knowledge and experience have taught them where the treatment would be likely to succeed and where it would prove ineffectual. I here advocate its use, not as a universal remedy or as a supplanter of ordinary medical treatment, but as a powerful auxiliary in combating many forms of disease not readily reached by other means.

C. L. T.

LONDON,
January 1, 1889.

CONTENTS

CHAPTER I

PAGES

INTRODUCTION - - - - - - - - 1–8

CHAPTER II

Examples showing the Power of the Mind over the Body.—Anæsthesia produced by the Imagination without Chloroform.—Cures effected by the Imagination and by Mental Emotions.—Illness and Functional Disorders induced by Morbid Direction of Thought.—Organic Changes possible from the Same Cause.—Illness, and perhaps Death, caused by Suggestion of Symptoms.—Auto-Suggestion.—Simulated Death.—Cures at Shrines and Holy Places.—Touching for the King's Evil.—Modern Instances of Efficacy of Royal Touch.—John Wesley and other Spiritual Leaders as Healers - 9–38

CHAPTER III

Power of Mind and Body increased by Concentration of Attention and Energy.—Suppression of One Faculty tends to increase the Development of Others.—Concentration of Mind on One Idea in Somnambulism, and Performance of Tasks impossible when Awake.—Some Tragical Results of Natural Somnambulism.—Artificial or Hypnotic Somnambulism may be turned to Therapeutic Purposes.—Natural Sleep may pass into Hypnotic Sleep, and *vice versa*.—The Faculties may be aroused and intensified in Hypnotic Somnambulism - 39–49

CHAPTER IV

Dr. Liébeault, of Nancy.—Description of his Treatment.—System free from Mysticism.—Curative Suggestions.—Explanation of the Phenomena.—Definition of Hypnotism.—Absolute Sleep or Unconsciousness unnecessary for Curative Treatment.—Theory of Professor Charcot not accepted by the School of Nancy.—Proportion of Persons Hypnotizable and Degrees of Hypnotic Influence.—Phenomena of Somnambulism outside the Sphere of Psycho-Therapeutics - 50–65

CHAPTER V

PAGES

Psycho-Therapeutics not an Exclusive System of Treatment.—Some Diseases found to benefit from it.—Organic Processes affected by Hypnotic Suggestion.—Blisters and *Stigmata* so caused.—Treatment especially useful in Neurotic Diseases.—Hysteria, Hypochondriasis, Dipsomania, and the Opium Habit.—Moral Depravity.—Double Consciousness.—Permanence of Cures.—Hypnotism distinct from Magnetism.—Possible Abuse of Hypnotism not a Bar to its Use in Medical Treatment.—Restrictions and Precautions necessary.—Safeguarding Over-sensitive Subjects - - - 66–130

CHAPTER VI

Some Points in the Physiology and Psychology of Hypnotism.—Authorities and their Theories.—Expectant Attention, Suggestion, and Inhibition.—Induction of Functional Aphasia, and what it teaches.—Exaggeration or Suppression of Certain Senses and Functions in the Hypnotic State.—Automatism in Hypnotism and in the Pathological State.—Amnesia.—Hypnotism compared with the Action of Poisons.—The Double Brain: its Single Action in Health and Possible Dual Action in Disease and in the Hypnotic State.—Cases illustrating this.—The Induction of Automatism without Hypnotism - - - - - - 131–153

CHAPTER VII

Reality of Hypnotic Phenomena.—Simulation Tests.—Practical Directions for Medical Hypnotism.—Excessive Nervous Tension.—Warmth by Suggestion.—Vital Reaction.—Absence of Personal Element in the Nancy Treatment.—Method of Fascination.—Some Diseased Conditions benefited by Hypnotism.—Medical Education essential for its Successful Practice.—Racial Susceptibility.—Wetterstrand's Practice.—Table of Diseases treated by the Author.—Farez and *Suggestion Somnique*.—Mental Diseases and Insanity as affected by Hypnotism.—Voisin's Success in Lunacy.—Researches of Italian Alienists and Neurologists.—Forel's Opinion of the Treatment.—Treatment of Epilepsy by Hypnotism and by Prolonged Hypnosis.—Hypnotism in Organic Disease.—Treatment of Stammering, Rheumatism, Neuralgia, Sea-Sickness, Neurasthenia, Asthma, Chronic Alcoholism.—Statistics of Results and Remarks.—Aids to Hypnotism - - - - - 154–250

CHAPTER VIII

PAGES

Inhibition.—Definition.—Dynamogenesis.—Theories of Brown-Séquard.—Lauder Brunton.—Interference.—Experiments 251–265

CHAPTER IX

Natural Analogies of Hypnosis.—Relation of Hypnosis to Sleep and other Conditions.—Theory of Hypnosis.—Leucomaines and Animal Alkaloids.—Hughlings Jackson's Three Planes of the Central Nervous System.—Cortical Inhibition.—Morselli's Mental States and Centrifugal Equivalents.—Cortical Control.—Function stimulated by Hypnotism.—Foundations of Consciousness.—Chloroform and Hypnotic Anæsthesia contrasted.—McDougall's Views.—Individuality dependent on Continuity of Memory.—Pathological and Hypnotic Lethargy.—Alcohol and Hypnosis.—Researches of Tamburini and other Italian Scientists on Excretions during Hypnosis.—Hypnotism and Hibernation - 266–295

CHAPTER X

Some Cases treated by the Author: 1. Insomnia; 2. Writer's Cramp; 3. Tabes Dorsalis; 4. Torticollis; 5. Traumatic Headache; 6. Chronic Diarrhœa; 7. Paroxysmal Sneezing; 8. Tic-douloureux; 9. Symptoms dependent on Organic Heart Disease; 10. Enuresis Nocturna; 11. Gouty Sciatica; 12. Chronic Rheumatism; 13. Nervous Dyspepsia; 14. Amenorrhœa; 15. Functional Dysmenorrhœa; 16 and 17. Dipsomania; 18. Moral Breakdown; 19. Moral Case; 20. Tobacco Habit; 21. Neurasthenia; 22. Alcoholism; 23. Nervous Prostration; 24. Extreme Anæmia; 25. Kleptomania; 26. Mischievous Morbid Impulse; 27. Agoraphobia; 28. Puerperal Insanity; 29. Mania for Washing; 30. Spasmodic Asthma; 31. Morbid Sexuality; 32. Ménière's Disease; 33. Neurasthenia; 34. Diabetes - - - - - 296–346

CHAPTER XI

Treatment by Suggestion during the War. By A. Percy Allan, M.D., B.S. Lond. - - - - - 347–355

CHAPTER XII

Some Recent Experiences during the Great War - - 356–359

APPENDIX

PAGES

Dr. Yung's Experiment with 'Magnetized Cards.'—Hilger's Experiment to show Subconscious Direction.—James Braid, of Manchester.—Duration of Hypnotic Sleep.—Luys' Rotating Mirror and Ochorowicz's Hypnoscope.—Theory of Professor Delbœuf.—Theory of F. W. H. Myers.—Some Phenomena of Hypnotic Somnambulism.—Liébeault's Classification of Hypnotic Sleep.—Method of Public Performers.—Resolutions adopted at the Paris Congress. — International Statistics of Hypnotism.—Experiments in Auto-Suggestion. —Hypnotization of Animals.—Treatment by Transfer.—Christian Science Healing.—Hypnotism and Crime.—The Hypnotic Will Case.—False Evidence and Suggestion in Legal Cases.—Belgian Legislation regarding Hypnotism 360–406

INDEX - - - - - - - - 407–413

TREATMENT BY HYPNOTISM AND SUGGESTION

CHAPTER I

INTRODUCTION

It is desirable to set forth clearly the genesis of the present revival of *psycho-therapeutics*, lest, as sometimes happens, unassuming merit be deprived of the honour due to it, and other claims arise to obscure those of the real founders of the system.

Perhaps the most unfounded claim is that of the magnetizers, who assert that they have kept the subject before the public by their experiments and entertainments. This contention is easily answered, for, in the first place, the method practised by Dr. Liébeault,* and described in these pages, differs in nearly every respect from that employed by such persons; and, secondly, their performances have never done anything else but degrade this branch of medical science, and turn the medical profession against it. Their method is unchanged since the beginning of the last century, and they have hardly even added a new trick to their stock-in-trade.

So low had the estimate of the scientific value of induced sleep fallen, that in 1874 the French medical

* Dr. Liébeault was born at Ferrières, September 16, 1823. He took his M.D. degree at the University of Strasburg, and after a few years spent in general practice in the country settled in Nancy, where he practised hypnotism for many years. He died at Nancy, February 18, 1904.

dictionaries threw doubts on its existence, except as a pathological curiosity, and the English encyclopædists followed much the same course.

Since the year 1875—when Dr. Charles Richet began to write on the subject of hypnotism—there has been no lack of scientific investigators on the Continent. Among the most distinguished of these are Charcot in Paris, and Heidenhain* at Breslau, and they have demonstrated beyond the possibility of doubt the genuineness of the phenomena of induced somnambulism. But long ere this—in 1860—Dr. Liébeault had opened his public dispensary at Nancy, and had elaborated his system, which he caused to be known as *Treatment by Suggestion.*

In 1866 he published a book on the subject, in which he gave to the world a full description of the means used by him, and an account of cases successfully treated.† But little notice was taken of it at the time, and even in Nancy, where Dr. Liébeault lived a retired life, devoted to the poor among whom he practised, he was regarded as, at the best, an amiable but mistaken enthusiast. In 1882, Professor Bernheim, of the Faculty of Medicine at Nancy, began to investigate the system, quite as a sceptic, so he tells us, and, being soon convinced of its value, introduced it into his hospital *clinique.* In 1884 he brought out his classical work on suggestion.‡

Dr. Bernheim was well known in the medical world, and his book attracted general attention on the Continent. Physicians began to practise hypnotism in many of the larger cities, and flourishing *cliniques* sprang up in all directions. Among the first and most notable of these are those of Drs. Van Renterghem, of Amsterdam; Wetterstrand, of Stockholm; Von Schrenk-Notzing, of Munich; Moll, of Berlin; and Bérillon, of Paris.

* 'Hypnotism; or, Animal Magnetism,' second edition, London, 1888.

† 'Du Sommeil et des États Analogues, considérés surtout au Point de Vue de l'Action du Morale sur le Physique,' Paris, 1866; second edition, 1889.

‡ 'De la Suggestion, et de ses Applications à la Thérapeutique,' second edition, Paris, 1887.

This book does not profess to give a literary history of the movement, and a glance at the catalogue* given by Dr. Max Dessoir of recent publications on hypnotism is enough to deter any but the most determined student from approaching the subject. During the two years 1888, 1889, there appeared nearly 400 books, pamphlets, and articles on hypnotism. A large proportion of these are by medical men, and are written in the French language. But among the pioneer writers on hypnotism must be named Professors Beaunis† and Liégeois,‡ of Nancy, who have treated the matter from the standpoint of their special departments, physiology and jurisprudence. Professors Delbœuf, of Liège; Fontan and Ségard, of Toulon; Preyer and Max Dessoir, of Berlin; Krafft-Ebing, of Vienna; Forel, of Zurich; Wetterstrand, of Stockholm; Van Renterghem and Van Eeden, have given us thoroughly practical books describing their practice, and Dr. Albert Moll's book is as well known in England as in Germany. On the eve of his retirement from practice, Dr. Liébeault issued a new volume containing the results of his thirty years' experience, and this book will be in the hands of every student of the Nancy treatment.

In 1889 I wrote that, as far as I knew, there was no literature in English on the subject, and Dr. A. T. Myers, commenting in the *Practitioner* § on the backwardness shown by the profession in this country in investigating hypnotism, cited the references to the treatment in the medical journals of the world during the year 1888. He found only seven notices in English journals, against sixty-one in those of France, thirty-five in Germany, twenty-two in Italy, and sixteen in those of the United States.

* 'Erster Nachtrag zur Bibliographie des Modernen Hypnotismus,' Berlin, 1890.

† 'Du Somnambulisme Provoqué,' Paris, 1886.

‡ 'De la Suggestion et du Somnambulisme dans leur Rapports avec la Jurisprudence et la Médecine Légale,' Paris, 1888.

§ Vol. i., 1890, p. 201.

The following list gives a few of the more important books and papers published on hypnotic suggestion:

Liébeault: 'Thérapeutique Suggestive, son Méchanisme,' etc., Paris, 1891.
Bernheim: 'Hypnotisme, Suggestion, Psycho-thérapie,' Paris, 1891.
Fontan et Ségard: 'Éléments de Médecine Suggestive,' Paris, 1887.
Delbœuf: 'De l'Origine des Effets Curatifs de l'Hypnotisme,' Paris, 1887.
A. Pitres: 'Leçons Cliniques sur l'Hystérie et l'Hypnotisme,' Paris, 1891.
Bonjean: 'L'Hypnotisme, ses Rapports avec le Droit et la Thérapeutique,' Paris, 1890.
Van Renterghem et Van Eeden: 'Clinique de Psycho-thérapie Suggestive,' Brussels, 1889.
Von Krafft-Ebing: 'Eine experimentelle Studie auf dem Gebiet des Hypnotismus,' Stuttgart, 1889.
Von Schrenk-Notzing: 'Ein Beitrag zur therapeutischen Verwertung des Hypnotismus,' Leipsic, 1888.
Forel: 'Der Hypnotismus, seine Bedeutung und seine Handhabung,' Stuttgart, 1889.
Forel: 'Der Hypnotismus, seine psychophysiologische medicinische,' etc., Stuttgart, 1891.
Preyer: 'Der Hypnotismus,' Vienna and Leipsic, 1890.
Moll: 'Der Hypnotismus,' Berlin, 1890 (second edition).
Wetterstrand: 'Der Hypnotismus und seine Anwendung in der Practischen Medicin,' Vienna and Leipsic, 1891; English translation, 1897.
Lehmann (of Copenhagen): 'Die Hypnose,' Leipsic, 1891 (German edition), 'und die damit vorwandten normalen Zuständten.'
Morselli: 'Il Magnetismo Animale, La Fascinazione, e gli Stati Hypnotici,' Turin, 1866 (second edition).
Tanzi: 'Sulla cura suggestiva del morfinismo,' Naples, 1889.
Herrero: 'El Hypnotismo y la Sugestion. Estudios de Fisiopsicologia y de Psico-terapia,' Valladolid, 1889.
Voisin: 'Suggestion Hypnotique dans certaines formes d'Alienation Mentale,' Paris, 1897.
Bérillon: 'L'Hypnotisme et l'Orthopédie Mentale,' Paris, 1898.
Hack-Tuke: 'Sleep-Walking and Hypnotism,' London, 1884.
Gerald Yeo: 'The Nervous Mechanism of Hypnotism,' London, 1884.
Milne Bramwell: 'Hypnotism: its History, Practice, and Theory' (second edition), London, 1906.
Forel: 'Hypnotism; or, Suggestion in Psycho-Therapy' (translated from the fifth German edition by H. W. Armit), London, 1906.
T. W. Mitchell: Many articles on Psychology and Hypnotism in current medical literature.
Dr. Percy Allan: Ditto.
Münsterburg: 'Psycho-Therapy,' 1911.
Morton Prince: 'Psycho-therapeutics,' 1911.

Wingfield: 'Introduction to the Study of Hypnotism,' 1910; second edition, 1920.
Crichton Miller: 'Hypnotism and Disease,' 1912.
Betts Taplin: 'Hypnotism,' 1912.
Betts Taplin: 'Hypnotic Suggestion and Psycho-Therapeutics,' 1918.
G. W. Jacoby: 'Suggestion and Psycho-Therapy,' 1912.

Students of contemporary hypnotism will find the subject exhaustively dealt with in the *Revue de Psychothérapie*, a medical journal devoted to this branch of therapeutics, published monthly in Paris, under the able editorship of Dr. Edgar Bérillon.

A paper read before the New South Wales branch of the British Medical Association by the Hon. J. M. Creed, M.R.C.S., Member of the Legislative Council, published in the *Australian Medical Gazette*, January 20, 1899, entitled 'My Experience of Hypnotic Suggestion as a Therapeutic Agent,' gives an interesting account of successful hypnotic practice in the Antipodes.

The Society for Psychical Research has done, and is doing, much good work in the scientific investigation of hypnotism, and its members were among the first persons in this country to recognize its importance as an aid to experimental psychology. The clear and able papers contributed by the late Henry Sidgwick, F. W. H. Myers, Edmund Gurney, Richard Hodgson, Frank Podmore, and by the Hon. Everard Feilding, and other writers, in the Proceedings of the society, are among the best things which have been written on the subject. The great posthumous work by Mr. Myers, 'Human Immortality,' devotes several chapters to the psychological aspects of hypnotism, and will be read by every earnest student.

To James Braid, the Manchester surgeon, is due the credit of having seen the germs of truth which lay hidden and obscured in the writings of Mesmer and the animal magnetizers. He attempted to explain by physical laws the effects produced by mesmerizers,* and he ridiculed

* 'Neurypnology,' London, 1843: 'The Power of the Mind over the Body,' London, 1846.

the notion of there being any such thing as a magnetic fluid or current. His disgust for the mysticism of mesmerism drove him, perhaps, too far towards the other extreme, and made him more rationalistic than the facts warranted him in being. Although he publicly demonstrated his system of healing—which he practised with much success—and wrote several works upon the subject, it appears to have died with him, and it remained for Liébeault to arrive at the truth of psychotherapeutics.

An important event connected with the progress of hypnotism in this country was the appointment of a commission by the British Medical Association as a result of the important discussion at the annual meeting held at Birmingham in 1890. It is hoped that the result will be increased interest in the subject by medical men and the prohibition of its use by showmen and idlers. No one wishes to restrict the use of hypnotism in the researches of men of science, for this most interesting study affords a key, as Professor Preyer says, to many psychical and physical processes connected with the nervous system; but we feel convinced that in the interest of the public, and for the dignity of the subject, it will be necessary to surround its employment with precautions against abuse.

One looks forward to a time, in a not very remote future, when Englishmen will take that leading position in the investigation and practice of hypnotism which one would expect from the compatriots of James Braid.

The present movement is practically the third revival of psycho-therapeutics in modern times. That inaugurated by Mesmer in 1776 came to nothing on account of the fraud, ignorance, and exaggeration with which it was surrounded, and the second under Braid found even less acceptance from contemporary men of science; but the revival we now see is probably destined to make a deep and permanent impression on the history of medicine. It is the outcome of evolution and scientific

progress in all departments of medical knowledge, and the time is ripe for its recognition and reception.

I believe that all great discoveries are led up to by previous half-discoveries; and it does not detract from Liébeault's credit that he started with a large amount of evidence on the subject collected by earlier observers, any more than Darwin's claim to be the first evolutionist is weakened by his having drawn on the material supplied by Lyell, Hooker, and a multitude of others. Liébeault's genius taught him to arrange and systematize the facts collected by his predecessors, and to find the true explanation of phenomena which they had misunderstood. His patience and steadfast courage led him to persevere in his work, undeterred by opposition or neglect, until now we find him the founder of a school which, as I have said, has its representatives all over the Continent—acute and clear-sighted men of science, of a class quite unlikely to entertain the fanciful theories of mesmerism on the one hand, or those of ' faith-healing ' on the other.*

I need hardly say that medical hypnotism has nothing

* The truth of this assertion has been agreeably verified by events. Dr. Liébeault retired from practice in 1891, and visitors to Nancy will no longer have the pleasure of seeing him at his *clinique* and listening to his kindly talk. He worked all his life from love of his profession, not from desire for gain, and he retired on a modest competence not acquired from his practice, which was wholly unremunerative. To celebrate the occasion, many of those who had enjoyed his friendship and derived profit from his instruction decided to present him with a testimonial. The movement was joined in by medical men from all parts of the world, and the presentation was made in May, 1891. There were over sixty subscribers to this testimonial, and among the contributors one finds many names of eminence in the profession, as Dumontpallier, of Paris; Preyer, of Berlin; Krafft-Ebing, of Vienna; Morselli, of Genoa; Cruise, of Dublin. Vide *Lancet*, June 27, 1891; and *Revue de l'Hypnotisme*, June, 1891.

Since the above was written Dr. Liébeault has died (February, 1904) in the house at Nancy he had inhabited so many years. The street has been renamed in his honour ' Rue Liébeault,' and a handsome bronze bust of him will be set up in the public gardens of Nancy. So the prophet has been honoured in his own city. Dr. Wingfield, who was, I believe, the first English physician of note to visit Liébeault at Nancy and seriously study his treatment, writes: ' He was a great man, the nobility of whose character surpassed even the value of his work ' (*op. cit.*, p. 118).

in common with spiritualism, and it is a curious thing that in this country some persons seem to think them associated.*

* At the recent Church of England Congress at Lambeth, 1920, the Rev. M. A. Bayfield, of the Society of Psychical Research, dealt mainly with the uses of the psychic force commonly known as suggestion, which is employed in medical science without the smallest relation to what is known as spiritualism.

CHAPTER II

Examples showing the Power of the Mind over the Body.—Anæsthesia produced by the Imagination without Chloroform.—Cures effected by the Imagination and by Mental Emotions.—Illness and Functional Disorders induced by Morbid Direction of Thought.—Organic Changes possible from the Same Cause.—Illness, and perhaps Death, caused by Suggestion of Symptoms.—Auto-Suggestion.—Simulated Death.—Cures at Shrines and Holy Places.—Touching for the King's Evil.—Modern Instances of Efficacy of Royal Touch.—Cures by Wesley and Other Religious Leaders.

ALL who have given any attention to the subject acknowledge what immense power the mind—acting in conjunction with or apart from the will—has over the body, forcing it at times to unusual or even extraordinary effort. This power is exercised both in health and disease, but is peculiarly evident—perhaps because it is more closely observed—in the latter condition. Everyone, the physician and psychologist especially, knows some curious instances illustrative of its effects; such as the story of the hospital patient to whom the consulting physician gave a prescription, with the remark, 'Take this, it will do you good.' At the man's next visit, he, being asked for the prescription, replied that he had swallowed it as directed, and it had, according to promise, done him 'a power of good.' There is nothing new or strange in that, for the administration of boluses made of pieces of paper, upon which are written texts from the Koran, forms an important part of medical treatment in Mohammedan countries. Hack-Tuke* gives a number of cases in which drugs have acted, not according to their proved properties, but according to

* 'The Influence of the Mind upon the Body,' London, 1884.

the expectation of the patient. For instance, a student having asked for an aperient pill, the dispenser, by mistake, gave him one composed of opium and antimony, which, instead of producing the usual effect of inducing perspiration and drowsiness, acted in the way the student expected. Every medical man can quote examples of this sort from his own practice, and if sometimes he is wrongfully accused of having produced baneful effects, he is indemnified at others by having marvellously good results ascribed to very simple measures.

There are few cases of this kind more remarkable than one related by Mr. Woodhouse Braine, the well-known anæsthetist. Having to administer ether to a hysterical girl who was about to be operated on for the removal of two sebaceous tumours from the scalp, he found that the ether bottle was empty, and that the inhaling-bag was free from even the odour of any anæsthetic. While a fresh supply was being obtained, he thought to familiarize the patient with the process by putting the inhaling-bag over her mouth and nose, and telling her to breathe quietly and deeply. After a few inspirations she cried, 'Oh, I feel it; I am going off!' and a moment after her eyes turned up, and she became unconscious. As she was found to be perfectly insensible, and the ether had not yet come, Mr. Braine proposed that the surgeon should proceed with the operation. One tumour was removed without in the least disturbing her, and then, in order to test her condition, a bystander said that she was coming to. Upon this she began to show signs of waking, so the bag was once more applied, with the remark, 'She'll soon be off again,' when she immediately lost sensation, and the operation was successfully and painlessly completed. This girl had taken ether three years before, so that expectation and the use of the apparatus were sufficient to excite her recollection, and call back the effects of the drug as then experienced.

But this recalling of a past impression does not explain the experience of Dr. A., who is anæsthetist to a large

dental hospital. He tells me that he often pretends to give gas without doing so, and he finds many patients become anæsthetic when he simply places the apparatus over their face, tells them to breathe deeply and go to sleep. He finds anæmic girls are the best subjects for this harmless deception.

It is told that when Sir Humphry Davy was investigating the properties of laughing-gas—as nitrous oxide was then called—he proposed to administer it to a man who was suffering from tic-douloureux, but before doing so he tried his temperature by putting a thermometer into his mouth. The man took this instrument for some new and subtle remedy, and in a few minutes exclaimed that the pain was cured. The same belief in the efficacy of the thermometer remains to this day among the uneducated, as a friend of mine found to his cost when he was hospital-clerk to a well-known physician. It was his duty to take each morning the temperature of every patient; but on one occasion, being pressed for time, and knowing by experience that a certain patient's temperature was always normal, he saved a few minutes by leaving it untried. Later in the day, when the physician asked this man how he felt, he replied that he was much worse, as might be expected considering the way in which he was neglected. On inquiry it came out that the potent charm of having the glass tube in his mouth for three minutes had been omitted, and my friend got a reprimand. The late Sir Francis Cruise, physician to the King in Ireland, who made much study of hypnotism, believed in its efficacy, and used it in his extensive practice, told me that many years ago he was engaged in a series of experiments with an early form of sphygmograph in a Dublin hospital. Among the patients was a man incurably ill with phthisis and dilated heart. He improved considerably with treatment and rest, but he assured inquirers that what did him most good was the appliance the young doctor used to put round his wrist.

Laycock ('Nervous Diseases of Women,' p. 184) quotes

the case of a gentleman suffering from quotidian ague who became so interested in conversation on one occasion, that the hour for his paroxysm passed without his perceiving it, and he escaped the attack. This story gives one ground for believing a statement frequently made—that the time of the recurrence of attacks of intermittent fever may be altered by moving the clock-hands unknown to the patient, and thus arousing expectant attention.

On the other hand, Sir W. Goodhart mentions the case of a hysterical woman who consulted a doctor about her health. He examined her chest, and, thinking he detected signs of phthisis, expressed great surprise that she had no cough. Though up to that time she was free from any symptom of the kind, the suggestion was sufficient to excite a most troublesome and obstinate cough which it was very difficult to cure. Sir W. Goodhart cites this case as a warning to the practitioner against being too persistent in asking leading questions.* A very excellent and clever lady of my acquaintance tells me she never consults doctors now, as she finds they always make her worse by their suggestions of disease. For instance, after waiting some time in an atmosphere of discomfort and suffering in the ante-room, she would be shown into an impressive consulting-room, and find herself face to face with a grave and learned physician, who would fix her with a glittering eye, and say with a solemn and sepulchral voice, 'Where is your pain?' The poor lady would reply: 'Sir, until this moment I had no pain; but now you make me feel pains all over me.' I don't suppose there are many people so bad as that; but we learn from extreme cases.

Dr. Forel (*op. cit.*, p. 27) confesses how in his early days, before he had studied psycho-therapeutics, he once 'suggested' a gastric ulcer to a patient in whom he suspected this condition. The woman developed a number of symptoms of the disease, and was confined to bed for months. Afterwards he found her to be an excellent

* 'Common Neuroses,' Harveian Lectures, 1891.

hypnotic subject. I remember, as a very young practitioner, a labouring man coming to me to be examined as to soundness before joining the police. He was a strong young fellow, a market gardener, and he looked the picture of health. Almost as a matter of form I put the stethoscope to his chest, and to my surprise found a loud aortic bruit. I told him he had heart disease and was unfit for service—I fear rather brusquely. The poor fellow nearly fainted on the spot, and I am afraid the shock must have made him ill for days. Evil is wrought by want of thought more than by want of heart. In such cases it is one of our difficulties to know how much to conceal and how much to reveal, having the patient's interests and our own reputation to consider. There is a story told by Rudyard Kipling of a soldier with locomotor ataxy, who was able to pull himself together as long as there was fighting to be done, but quickly went to pieces when the surgeon examined him and invalided him home.

Dr. Arthur, of Sydney, New South Wales, has ingeniously taken advantage of the fact that the force of suggestion is very greatly increased by hypnotism. He has reported in the *British Medical Journal* a series of cases in which he had tried hypnotism with excellent palliative results. But the pains returned from time to time, and it was impossible for the patients always to go to him for relief. He therefore hypnotized them, and told them that whenever their symptoms recurred they had only to take a dose of the medicine he would give them and they would experience immediate relief. Among these cases were one of carcinoma uteri, one of scirrhus of the breast, one of locomotor ataxy, etc., incurable diseases, in which all we can do is to relieve symptoms. The medicine he gave, which hypnotic suggestion caused to act as a panacea, was a mixture of tincture of valerian. He terms this method ' treatment by indirect suggestion.'

The power of religious ecstasy and absorbing religious contemplation, in all creeds and in all climes, to cause disregard of surroundings and contempt for physical

suffering need not be insisted upon, for its reality is attested by all history. From the days when Queen Jezebel's priests mutilated themselves on Mount Carmel, to the present time, when we have seen the dervishes hurl themselves on the bayonets of our soldiers in the Soudan, utterly unmindful of the pains of death, and seeing only the plains of paradise beyond, the story is the same. A condition similar to hypnosis undoubtedly prevails in such cases. It is asserted, and with some reason, that in many cases martyrs at the stake have been mercifully spared much of the suffering which seems inseparable from their cruel death, in consequence of a hypnotic state, with its attendant anæsthesia, being induced in them, partly the result of religious fervour and abstraction, and partly brought about by the glitter of the flames and the clamour of the crowd, over-stimulating certain sensory centres to the consequent inhibition of others. The devotees of certain sects obviously undergo hypnotization before practising their rites—*e.g.*, the Aïssouans who recently visited London. These Arabs are hypnotized by their priest or chief, and in the hypnotic state allow themselves to be stung by scorpions and devour venomous snakes.

Brown-Séquard relates a remarkable case of ecstatic catalepsy in a girl whom he was called in to see. She lived in Paris, close to the Church of St. Sulpice, and every Sunday morning at eight o'clock, when the bell began to ring, she used at once to rise from her bed, mount the edge of the bedstead, and stand there on tiptoe until the bell sounded at eight in the evening, when she returned to her bed. The board on which she stood was curved and polished, and it would have been impossible for the most athletic man to have remained on it in such a position for more than a few minutes at a time. While standing there she was utterly unconscious of her surroundings, and continued murmuring prayers to the Virgin all the time, her hands clasped, her eyes fixed, and head slightly bent. Some of the bystanders were sceptical,

and Brown-Séquard, to put her to the test, applied a strong interrupted current to her face. She showed no sign of pain, but the muscles reacted energetically, and her intonation was therefore slightly affected. The girl was weak and anæmic, and was so thoroughly exhausted by her Sunday exertions, that the remainder of the week she could only lie helpless in her bed. The enormous increase in muscular and nervous force in one direction (dynamogenesis) was accompanied, as is invariably the case, by inhibition of other functions—in this case, those of higher cerebration.*

A rudimentary knowledge of electricity is sufficient to assure us that the vast majority of popular electrical appliances—such as belts and pads—are absolutely inert, and that the good they undoubtedly achieve in some cases is due to the stimulating effect on the imagination.† If the public confidence is shaken, cures no longer take place, as was clearly demonstrated in the recent notorious electropathic belt trial. I am acquainted with a civil engineer of good standing in his profession, who assured me he had been cured of lumbago of very long standing by one of these belts, and he actually gave the proprietors a testimonial to that effect, which was widely published. The exposure in court of the inertness of the appliance opened this patient's eyes, and he acknowledged that the cure was largely due to imagination and suggestion. Next time he gets lumbago he will seek a new specific which will appeal to his imagination in a different way, for he thinks himself much too clever for orthodox medical treatment. Anti-rheumatic rings, cholera-belts, camphor-bags, and such-like 'preventives,' probably act in a similar way. Therefore, though these and kindred contrivances

* *Revue Hebdominaire*, 1882, p. 36.

† *Vide* letter by Dr. Steavenson in *Lancet* and *British Medical Journal*, October 16, 1889. Professor Ballin, the eminent authority on nervous diseases and physician to the Hôtel Dieu, Paris, attributes at least one-half of the effects of electro-therapeutics to suggestion acting on the patient's mind ('Neurasthenia,' translated by Dr. Campbell Smith, 1908 edition, p. 188).

do not operate in the expected manner, I should be sorry to say that they do not serve a useful purpose; by inspiring confidence and keeping alive hope, they often enable their possessor to go unharmed in the midst of contagion, or help him to overcome disease; for there is no more effectual depressant, no surer harbinger of disease, than fear. Much of the immunity from infection enjoyed by physicians and nurses is due partly to the preoccupation of their minds, which leaves no room for selfish terror, and partly to the confidence begotten by long familiarity with danger.

The plan of substituting a harmless draught for the narcotic mixture, without which a nervous patient thinks himself unable to sleep, is, as we all know, continually resorted to, and is an instance of the beneficial employment of the imagination.

Drs. Beard and Rockwell relate how they experimented on rather a large scale with patients in a New York hospital with inert drugs. On one occasion, to see what imagination would do, they suddenly had the patients in a ward informed that a mistake had been made by the dispenser, and that an emetic had been administered to some of the patients instead of the usual mixture. A large proportion of the patients were thereupon seized with vomiting, and brought up the harmless dose which had been given to them.* This effect of the imagination it is not difficult to understand, but Dr. J. W. White, Professor of Clinical Surgery in the University of Pennsylvania, has collected a large number of instances showing the beneficial effects of surgical operations *per se*. Hospital surgeons are not supposed to be particularly imaginative, and yet Dr. White tabulates hundreds of cases which he has brought together from recently published medical journals, English, American, and foreign.

For instance, he records fifty-six cases of trephining for epilepsy in which nothing abnormal was found to account

* 'Sexual Neurasthenia,' New York, 1890.

for the symptoms, and yet twenty-five of these cases were cured, and eighteen improved.*

In thirty epileptic cases a bloodvessel was ligatured, generally one of the vertebral arteries, and cure had resulted in fourteen cases, whilst fifteen were improved. In nine cases the operation was tracheotomy, and two of these were cured, and six greatly improved. Dr. White instances several cases in which exploratory incisions under chloroform have revealed no disease, but have been followed by the cure of symptoms simulating disease, and from his experience he feels justified in considering that ' there are large numbers of cases of different grades of severity and varying character which *seem* to be benefited by operation alone, some of them by almost any operation.'†

Dealing with epilepsy, it would be well to mention the view of Dr. Arthur Hurst—viz., that all the fits an epileptic has are not true epilepsy. Some are hysterical. The patient feels like having a fit, gets nervous, and a hysterical fit simulating the genuine one comes on. It is possible to remove the hysterical element by psychotherapy, and so reduce the total number of fits.

The cure of warts by charms and spells is, I believe, a matter of common belief in every village in England. A medical friend practising in the country told me not long ago that he had twice excised a number of warts from a boy of thirteen, and each time a new crop had soon grown. An old village woman recited some apparently childish formula over them, and behold! the warts withered away, and in a few days had fallen off and disappeared. My friend is extremely orthodox, and did not at all understand nor approve of such interference with his patient.

There was an interesting discussion on the cure of warts

* The extraordinary number of perforated skulls found in neolithic monuments was puzzling to antiquarians until the theory was adopted that they were the results of trephining for epilepsy. The success of the operation must have encouraged the men of science of those days to hold to their belief that the demon of epilepsy was expelled through the hole thus made.

† *Annals of Surgery*, St. Louis, 1891.

by suggestion at a meeting of the Société d'Hypnologie et de Psychologie in June, 1902. Many physicians testified to having seen charms succeed in some cases and fail in others, and Dr. Farez showed a series of photographs taken of a girl's hand he had cured by hypnotic suggestion after charms had failed. Dr. Bérillon stated that to test the discriminating powers of suggestion he had in a very bad case treated only one hand, and that this was speedily cleared of warts, while the other remained disfigured until he applied hypnotic suggestion* to that also.

On the other hand, it is possible for an apparently quite healthy person to develop, by pure imagination, the symptoms of serious illness. Laymen who dabble in medical science, and medical students at the beginning of their course, are apt to imagine that they have one or other of the diseases they have been studying, heart trouble being perhaps the most usual; and of this they do frequently develop some of the subjective symptoms.

A friend tells me that once only in his life has he suffered from laryngitis and loss of voice. This was while attending Sir Felix Semon's lectures on diseases of the throat. It may have been a mere coincidence, but

* A prominent member of the Society for Psychical Research, Miss Mason, has reported several cases of cure she has effected by simple suggestion, and she tells me she generally succeeds, especially with children. She just touches each wart with her finger and says 'Go away,' and by her next visit she finds they have gradually shrivelled up and disappeared. Miss Mason holds an important Government inspectorship, so her dignified position no doubt greatly impresses the small patient. It is stated that the more vascular a wart is, as shown by its readiness to bleed, the more likely is it to respond to suggestion. I had a curious experience in 1909 with a growth more serious than a wart—molluscum fibrosum. The patient, a lady of fifty, had derived much benefit from hypnotic treatment for aural vertigo and neurasthenia. Her confidence was unbounded, and she asked me to 'suggest away' a growth which had troubled her for months and was rapidly increasing. She hated the idea of an operation even with an electric wire, so I consented to try, but had little faith in the result. The growth was very vascular, about the size of a shilling, and attached to the skin of the thorax by a pedicle. After four or five treatments suppuration set in at the base of the pedicle, and in twelve days the growth sloughed off, leaving only a minute scar. It may have been a coincidence, but hypnotism was credited with the 'miracle.'

that hardly explains the frequent instances of medical men who have succumbed to the disease which they have made their special study—*e.g.*, Professor Trousseau from cancer of the stomach. It is possible that the mind, being continuously fixed on one special organ, predisposes to disease of that organ.

Hypochondriasis is, as we know, a condition in which the patient feels the working of his internal organs, and is morbidly conscious of them. It tends to grow worse, because his attention becomes more and more fixed upon functions which ought to be performed automatically, and unless some powerful mental stimulant is applied, organic disease is sometimes actually set up. The late Sir J. Russell Reynolds* has collected and classified several cases of paralysis dependent on functional causes, which were cured by careful treatment directed chiefly to the morale of the patients. He points out the difficulties attending the ordinary treatment, and shows how necessary it is to counteract the morbid ideas which are often at the root of the mischief. Most of the cases to which he refers were cured, but some resisted all forms of treatment. Dr. James Reynolds† relates a case of a woman who died in the Birmingham General Hospital from the effects of hysterical paraplegia; the necropsy showed that there was no organic disease. He thus summarizes the dangers of this condition: 'If the nature of the malady be mistaken, and the stimulus of the will be habitually withheld from the inactive muscles, the nutrition of that part of the nerve centre which presides over those muscles becomes impaired, and what was at the beginning a mere perversion of function is finally converted into real organic disease.' Russell Reynolds thus concludes his paper: 'I believe and know that many cases of apparently grave disorders of the nervous centres may be removed entirely; and that in other instances, when the ideal affection is

* *British Medical Journal*, vol. ii., 483, 1869.

† 'Paralysis and other Diseases of Motion dependent on Idea,' *ibid.*, p. 632.

grafted upon organic lesion, much may be done to remove the former, and afford so much of the stimulus of hope, that the cure of yet graver symptoms is brought within the range, not only of possibility, but of probability and of actual fact.' There are many people of both sexes who never hear of a disease without fancying they have it. The illness of a royal or distinguished sufferer, the progress of which is daily recorded in the newspapers, will sometimes become almost epidemic; thus, throat specialists can tell some curious stories of the increase of imaginary and real throat affections during the illness of the late Emperor Frederick. That fear will promote disease has been abundantly proved during outbreaks of cholera, small-pox, the plague, and other epidemics. Pseudo-hydrophobia is a recognized malady, and no doubt many supposed cures of hydrophobia have in fact been cures of this fear-induced imitation.

Laycock tells the story of a woman, aged forty-eight, who was in constant attendance on her daughter during her tedious labour. Though she had not menstruated—she had passed the menopause—for eight years, she experienced uterine pains, and had a sanguineous discharge from the parts, and the next day her breasts were swollen, painful, and discharging a serous fluid.* Quoting Sir Benjamin Brodie, he adds that patients have been so acted upon by their fears, and by seeing their friends affected, that they have imagined they have had tumours of the breast, and it is not improbable that the disease has been so produced.

Nothing can illustrate this truth better than Kinglake's description of the behaviour of the Levantines during an outbreak of the plague at Cairo, showing how these terror-stricken people invited the very danger they feared: 'For awhile it may be that the caution of the poor Levantine may enable him to avoid contact (with the garments of passers-by), but sooner or later, perhaps, the dreaded chance arrives. . . . From that dread moment his peace is gone; his mind, for ever hanging upon the fatal touch, invites the blow which he fears; he watches for the symptoms of plague so carefully that, sooner or later, they come in truth.

* *Op. cit.*, p. 112.

The parched mouth is a sign—his mouth *is* parched; the throbbing brain—his brain *does* throb; the rapid pulse—he touches his own wrist (for he dares not ask counsel of any man lest he be deserted) —he touches his wrist, and feels how his frighted blood goes galloping out of his heart. There is nothing but the fatal swelling to make his sad conviction complete; immediately he has an odd feel under the arm—no pain, but a little straining of the skin—he would to God that his fancy were strong enough to give him that sensation. This is worst of all. It now seems to him that he could be happy and contented with his parched mouth and his throbbing brain and his rapid pulse, if he only knew that there were no swelling under the left arm; but dares he try? In a moment of calmness and deliberation he dares not; but when for awhile he has writhed under the torture of suspense, a sudden strength of will drives him to seek and know his fate; he touches the gland, and finds the skin sane and sound, but under the cuticle there lies a small lump like a pistol-bullet, that moves as he pushes it. Oh! but is this for all certainty—is this the sentence of death? Feel the gland on the other arm. There is not the same lump exactly, yet something a little like it. Have not some people glands naturally enlarged? Would to Heaven he were one! So he does for himself the work of the plague, and when the Angel of Death, thus courted, does in truth and indeed come, he has only to finish that which has been so well begun.'*

Liébeault quotes several authors to prove that many persons seem to have had the power of so dominating their bodies by the force of will that they succeeded in keeping off illness which threatened them, and in some instances in averting or curing it when it actually had assailed them. Thus, he says, Pascal cured himself of neuralgia by steadfastly fixing his attention on other things, and Gœthe relates how he got rid of a troublesome cough in the same way. They induced a condition which was practically identical with slight hypnosis, and suggested to themselves functional changes in the direction of health.

Liébeault told me he was able to cure himself of slight maladies —such as facial neuralgia—by auto-hypnotism and auto-suggestion. He sent himself to sleep by fixing his gaze on some prominent object, such as a door-handle, and his mind on the disappearance of the malady, and he dropped off into a doze, out of which he awoke cured! But I apprehend that such a result can only be achieved by a few, and that, as a rule, both the induction of hypnosis and the suggestions for cure must come from without. In most persons the disease dominates the system, and entirely prevents the presence of that state of mental receptivity and confidence which is an essential preliminary to curative auto-suggestion.

Professor Dubois (quoted by Laycock) divided hypochondriasis into three stages: in the first the mind only is affected; the patient is harassed by imaginary diseases, and concentrates his attention on one or other of the viscera, thereby changing their innervation and bringing

* 'Eothen,' p. 257.

about the second stage. In the third stage these nervous changes terminate in organic disease of the affected organ, and the evil ceases to be one of imagination alone.

We sometimes come across people who tell us they ' have no time to be ill ' ; and certainly reports of longevity show that rust destroys more than use, and that hale old age is more frequently attained by those who have led busy lives than by idlers. Idleness is a well-known factor in producing all kinds of ailments, real and imaginary, of mind and body, perhaps because the idle man, from sheer lack of interest in life, devotes too much attention to his own organism.*

Imagination, combined with ' direction of consciousness ' (Sir H. Holland) to a part, will produce results which have been noticed by many pathologists. John Hunter said he was confident of producing a sensation in any part of his body simply by concentrating his attention on it. Sir H. Holland observes:† ' In hypochondriasis, the patient, by fixing his attention on internal organs, creates not merely disordered sensations, but disordered action in them.' And again: ' When there is liability to irregular pulsation (of the heart), this is brought on and increased by a simple effort of attention.'

The late Dr. Forbes Winslow, writing on this subject, says: ' It is a well-established fact that alterations of

* The remarkable growth of Christian Science is due to a great extent to the recognition by Mrs. Eddy and her followers of the foregoing facts. They tell people that, instead of being interesting, it is rather a mean thing to be ill. Some of them pretend to possess perfect health who formerly looked upon such a suggestion as almost an insult. Increased love of sport and exercise among women has done much to render the body more healthy and able to respond to mental stimulation. Times have changed since the days of Jane Austen, whose heroines were anæmic, and fainted on the smallest provocation; and even from those of Lord Beaconsfield, who wrote: ' At the present day, especially among women, one would suppose that health was a state of unnatural existence.' Now people threaten to go to the other extreme, and we hear of delicately-nurtured women under Christian Science teaching getting up and going about the house two or three days after childbirth, because the ' natural ' and savage woman can do so with impunity.

† ' Medical Notes and Reflections,' London, 1839.

tissue have been the result of a morbid concentration of the attention to particular organic structures. Certain feelings of uneasiness, or even pain, originate in the mind a suspicion of disease existing in particular parts of the body, it may be in the lungs, stomach, heart, brain, liver, or kidneys. Some slight irregularities and functional disturbances in the action of these organs being noticed, are at once suggestive (to the hypochondriac) of serious and fatal disease being established in the part to which the attention is directed. This deviation from a normal state of certain functions frequently lapses into actual *structural* disease, as the effect of the faculty of attention being for a lengthened period concentrated on this action. The continuous direction of the mind to vital tissues *imagined* to be in an unhealthy state undoubtedly causes an exaltation of their special functions, and an increase of susceptibility, by (it may be presumed) concentrating to them an abnormal quantity of blood, this being followed successively by (1) undue vascular action, (2) capillary congestion, (3) an excess in the evolution of nerve force, and (4) appreciable *structural* alterations.'* Hysterical contraction of the lower limbs frequently leads to structural changes and disease of the spinal cord (Charcot, Gowers), from impairment of nutrition and trophic changes leading to softening. Hack-Tuke says: 'If twenty persons fix their attention on their little finger for ten minutes, the result will be that most of them will feel decided sensations there, amounting in some to a mere sense of weight or throbbing, and in others to actual pain.' He endeavours to explain this by supposing that the act of attention excites an increased flow of blood to the part, and consequent increased vascularity of the sensory nerve ganglia, so leading to subjective sensation; or that the sympathetic nerve centres become excited, and the vasomotor nerves influenced thereby so as to cause in the finger temporary vascular changes which invoke sensation. He puts forward also a third hypothesis,

* 'Obscure Diseases of the Brain and Mind,' London, 1860.

which is interesting from the relation it bears to that given by Professor Delbœuf, of Liège—that fixing the attention on a part of the body for some time renders us conscious of the working of functions which are usually performed automatically and unconsciously. Sir James Paget thinks that by nervous excitement the temperature may be raised to at least 101° F. (from the normal 98·5° F.); and Professor Wunderlich says on the same subject:* 'In hysterical neurosis elevations of the temperature even to excessive heights may occur without any motive at all.'† Sir S. Wilkes relates cases of extreme anæmia caused by depressing emotions; and this agrees with the experience of all medical men, as does also the opposite observation, that pleasant emotions bring about a good state of the blood and secretions, and improve the health. Instances in which the hair has rapidly, even in a few days, suffered atrophic changes, leading to its becoming white and falling out, from excessive depressing emotions, are common; and under similar circumstances the teeth will sometimes rapidly decay. To show the interdependence of organs, and how even transitory ailments affect nutrition, Dr. Savill‡ quotes the case of a woman whose finger-nails for months exhibited cracks and deficiencies marking the period of severe sea-sickness.

* 'Medical Thermometry,' New Sydenham Society, 1871.

† I was once called to attend a medical man, whom I found in a state of great alarm on account of the way his temperature was rising. He was an extremely nervous man, suffering from overwork and anxiety, brought to a crisis by a severe attack of bronchial catarrh. He took his own temperature every few minutes, and in less than four hours it mounted from 101° F.—which represented the amount of fever which one expected to be present—to 104° F. He became almost delirious, and it took some time to soothe him; but in less than an hour the thermometer only registered 102° F., and without any special treatment soon dropped to 100½° F. In this case nervous excitement may be credited with having forced a rise of at least 2° F. Krafft-Ebing, in the celebrated case of Ilma S., was able by suggestion in the hypnotic state to bring about almost immediate depression of temperature to the extent of 2° or 3° F., showing the relationship between psychical and somatic processes under certain conditions.

‡ 'A System of Clinical Medicine,' vol. ii., p. 775.

Dr. de Watteville says:* 'One of the most striking properties of the nervous system is that by which the activity of one portion may be arrested or prevented—"inhibited"—by the activity of another . . . when we attend closely to a sensory impression or to a train of thought, the excitability of every part of the brain, except that actually engaged in the act, is diminished by an inhibitory action of the working portion. Thus, when we say that anger or fear paralyzes, we allude in very accurate language to the inhibitory influence which powerful emotion exercises on the cerebral functions.' Sir Lauder Brunton, speaking of the effect of emotion on the organs, says: 'Whenever emotional excitement is prevented from discharging itself externally by motor channels it is very apt to vent itself upon the internal viscera, and the principal channel through which it does this seems to be the vagus.' He instances the description of emotion without outlet given by Tennyson, in his poem 'Home they brought her Warrior Dead,' and points out how the poet recognized the reciprocity between emotion and motor impulses when he described the relief which followed on the sufferer bursting into tears and embracing her child.†

Dr. Charles Mercier, in his work 'Sanity and Insanity,' refers to the rapid pigmentary change both as regards the hair and the skin produced by excitement and emotion, and gives as an instance the case of a young Bengalee with perfectly black hair, who was arrested on a grave charge and publicly examined. The danger and horror of the situation so affected him that his hair actually changed colour before the eyes of the spectators, and in the space of half an hour was of a uniform grey tint. That emotion and fancy have power to modify the secretions is shown by the well-known fact that the mouth becomes dry and parched through fear or anger, while on the other hand it 'waters' at the idea of savoury food,

* 'Sleep and its Counterfeits,' *Fortnightly Review*, May, 1887.
† 'On Inhibition,' West Riding Reports, 1874.

the mental impression paralyzing or stimulating the secretory apparatus of the salivary glands. Violent emotion, again, will so modify the secretion of gastric juice as to cause indigestion in subjects at all predisposed to it. An attack of jaundice may be induced by anger—as the popular saying, 'Green with rage,' implies—from an accumulation of bile in the blood through nervous excitement causing 'inhibition' of the healthy function of the liver.

Disease, then, as we have seen, may, in hypochondriasis and kindred states, be induced by *auto-suggestion*, and there is no doubt that it may likewise be induced by suggestion from without. Let a man be told repeatedly by his friends that he is looking ill, that he does not seem fit to go about, that he must take care of himself, or he will have this or that complaint, and unless he has a very cheerful and well-balanced mind, he is pretty sure, for a time at least, to deteriorate in health. There is a story of such suggestions being made, for a practical joke, at the expense of a stalwart farmer, who, having been assured by several persons that he seemed in a bad way, did really take to his bed and go through an unmistakable attack of illness. This, of course, was a cruel and unwarrantable jest; yet a somewhat similar effect is occasionally produced by well-meaning persons, who are in the habit of commiserating their acquaintance for not looking well. Laycock (*op. cit.*, p. 112) says that the effect of 'fearful attention' has sometimes proved fatal, and instances the case of a man whose death that night was foretold by a ventriloquist at a dinner-party. So great was the effect of the prophecy that it fulfilled itself, and the unfortunate man actually died at about the time indicated. Sir William Gowers, referring to the influence the imagination may have on functions which are ordinarily beyond the control of the will, says that vomiting may be produced by an emotion of disgust, and the needed emotion may be called up without sensorial agency, as is shown by the strange cases in which the husband has retched in sympathy

with the vomiting of his wife in pregnancy, and has at last become so sensitive that sickness occurs as soon as he knows his wife is pregnant (' Diseases of the Nervous System,' vol. ii., p. 928).

In subsequent pages I shall detail some experiments to show how greatly the will acting through suggestion is able to modify the action of the heart in hypnosis, but such modifying influence is not necessarily confined to the hypnotic state. As a rule we are unable to exert any decided influence over the vegetative organs by simple ideation, but Professor Tarchanoff has recorded the case of a student who had the power of accelerating his heart's action by no less than thirty-five beats in a minute. Tarchanoff has very fully investigated and described the case, and he supposes that the acceleration does not depend upon deficiency in the controlling power of the vagus, but rather on increased control over the accelerators, which the student was able to exercise through the accelerator centres in the cord being connected with a will centre higher up.*

Hack-Tuke gives an instance of death itself being produced by suggestion. A Frenchman of rank was condemned to death for some crime, and his friends, willing to avoid the scandal of a public execution, allowed him to be made the subject of an experiment. He was told that he must be bled to death. His eyes were bandaged, and his arm having been lightly pricked, a stream of warm water was made to trickle down it and fall into a

* Quoted by Professor Hamilton, ' Text-Book of Physiology,' p. 569 (London, s. 1). On the other hand, Brown-Séquard relates how a student in his class was able at will to bring about an arrest of the heart's action (*Rev. Hebdominaire*, 1882, p. 36). A few years ago we made a series of experiments on hypnotized subjects at the rooms of the Society for Psychical Research. The effect of suggestion on the pulse-rate was very remarkable, but we found that Mr. Podmore's pulse was almost as much affected as the subject's by getting him to imagine himself running to catch a train. He realized the action very thoroughly, though sitting in a chair, and soon the heart responded to repeated urgent suggestion by quickening at least twenty beats in the minute. There was no question, of course, of hypnotism. It was simply a control experiment.

basin, while the assistants kept up a running commentary on his supposed condition. 'He is getting faint'; 'The heart's action is becoming feebler'; 'His pulse is almost gone,' and other remarks of the sort. In a short time the miserable man died with the actual symptoms of cardiac syncope from hæmorrhage, without having lost a drop of blood. (*Vide* note in Appendix, p. 376.)

There are some authenticated cases of apparent death being produced by auto-suggestion. We hear of this being accomplished by Indian fakirs and other religious enthusiasts in Eastern countries. Braid cites a remarkable and, he believes, thoroughly well-authenticated instance of a distinguished holy man, who, to convince the Maharajah Runjeet Singh* that he possessed this power over himself, apparently died, and was laid in a sealed coffin within a vault, the entrance to which was also sealed and guarded by soldiers. After six weeks, the time appointed by himself, he was taken out of the tomb in the presence of the Rajah and of several credible witnesses, English as well as native, and found to display every appearance of death. Having been gradually revived by his own servant, the still ghastly-looking, corpse-like creature sat up and spoke, his first words being addressed to the doubting Rajah: 'Do you believe me now?'

* This case is related in medical detail by Dr. McGregor in his 'History of the Sikhs,' p. 227. He was an eye-witness of the disinterment. There are other cases of a similar character, apparently well authenticated. The late Sir Richard Burton wrote to me on the subject, stating that he had investigated cases of vivi-sepulture, and was convinced of their genuineness.

The starting-point of the movements of the heart is the excitation produced by the pressure of the blood on the sensory or centripetal nerve fibres of the endocardium. If the contact of the blood with the endocardium be prevented, the heart ceases its pulsation, the physiological cause of the reflex action having been removed. If the chest, and consequently the heart, be compressed by a series of forced expirations and by holding the breath, so as completely to empty the lungs, and bring the muscular walls of the heart into close contact, we may succeed in stopping its beating. The performance of this experiment is not recommended, as it might have a fatal issue. *Vide* an article on 'La Mort Simulée,' by Dr. G. Tourdes, 'Dictionnaire Encyclopédique des Sciences Médicales,' Paris, 1875.

As sickness, and perhaps even death, may be produced by suggestion, so may be, and very often is, produced the cure of sickness. Towards this, however, auto-suggestion, though it might do much, does actually little or nothing, the natural reason being that the mind of a sick person, when left to itself, is prone rather to suggest morbid than health-inducing ideas, and so operates for mischief rather than in the direction of cure. Sir Thomas Clouston, in his article on mind cures in the *Quarterly Review* for January, 1913, tells how a patient under his care conceived the idea that he must die, and die he did in spite of all that could be done for him. He became extremely emaciated, though he took plenty of food. He goes on to say: 'It is certain that in time, through brain and mental influences, some diseases now regarded as incurable will be cured. Such influences largely control nutrition, and many organic diseases result from malnutrition.' Sir W. Osler once said: 'Hope and nux vomica will cure most curable diseases.' Every physician knows how, by determined hopefulness and cheerfulness, a sufferer from functional, and even from curable organic, disease may facilitate the work of healing, and materially hasten his recovery.

In all ages wonderful cures, real amid a multitude of shams, have been wrought at holy places dedicated to various saints of various cults. Among the throngs of pilgrims to Mecca, to the sacred rivers and temples of India, to the shrines of Buddhist hagiology, there are some who, having made the outward journey wearily and painfully, do indeed turn homeward with the gift of health. A proportion of those who have limped or been carried to Lourdes and to a hundred other holy places of the Catholic Church, do leave behind them crutches that they no longer require. Some of the sufferers who worshipped the Holy Coat at Trèves did truly receive in restored health the reward of their faith. Some wearers of relics and amulets are really the better for possessing them. The cheered, uplifted, and convinced mind works,

sometimes with startling rapidity, on the diseased body.*

For this same reason, touching for the king's evil did no doubt effect many cures. The royal progresses were announced some time beforehand, and the sufferers along their route had often weeks in which to cherish the expectation of healing, in itself so beneficial; and in those days of faith, when a belief in the divine right of kings was universal and strong, the touch of the royal hand must, except in the most hopeless cases, have had a stimulating effect which may often have caused a healthful reaction. Even in our own times, a royal touch, accompanied by kindly words, has good effect. We read in the 'Life of Victor Emanuel,'† that in 1865, when the cholera was raging in Naples, and the panic-stricken inhabitants were migrating by thousands from the city, the king, wishing to give his people courage, went the round of the hospitals. 'He stood beside the sick-beds, and spoke encouragingly to the patients.' Before one of those already marked for death, the king stopped, and taking his damp, frozen hand, he pressed it, saying, 'Take courage, poor man, and try to recover soon.' The warm grasp of the hand, the strong cheerful words, the recognition of the king's face, had an agitating effect on the dying man. That evening the syndic visited the king, and said: 'Your Majesty's coming is a joyful omen. I am happy to tell you that the doctors report a diminution of the disease in the course of the day, and your Majesty has unawares worked a miracle. The man you saw this morning stretched for death is out of danger this evening. The doctors say the excitement of your presence caused the salutary crisis.' In Carpenter's 'Physiology'‡ numerous

* *Vide* note in Appendix, p. 409, 'Spiritual Healing.'

† 'Life of Victor Emanuel,' by G. S. Godkin, vol. ii., p. 213.

‡ 'On the Influence of the Nervous System on the Organic Functions,' chap. v., ninth edition. Perhaps the most striking example of the power of the will and imagination to affect function, and even to initiate it, is afforded in a few rare but well-authenticated cases collected by Dr. Dunglison ('Human Physiology,' vol. ii., seventh edition), and quoted by Carpenter, in which strong

examples are given demonstrating the influence of the mind and imaginative faculties on the different bodily functions, and we have only to consider a moment to recall many personal experiences pointing in the same direction.*

Sir Lauder Brunton gives several examples, showing how vigorous belief on the part of a friend may avert what appears like inevitable death. For instance, when Melanchthon was lying very ill, and apparently dying, Luther was sent for to see his friend. On his arrival, he said: 'You must not die, Philip; we cannot spare you.' 'Oh, let me die quietly,' said poor Melanchthon. 'No, Philip, you must not die,' was the reply, followed by an impassioned prayer that Melanchthon should live. The effect was soon apparent, the tide turned and the sick man got well. I am not informed as to whether Luther often practised the healing art, but it is certain that most religious leaders and pioneers, from Mahomet† to George Fox the Quaker‡ and John Wesley, have occasionally exercised the power of curing the sick. There are some remarkable cases in John Wesley's 'Journal.' For instance, he writes:

'Friday, 16th October, 1788. Immediately after a

desire to furnish milk, combined with continued irritation of the nipple by the infant's mouth, has brought about a secretion of milk in the mammary glands of childless and unmarried women, and even of men. The not uncommon occurrence of pseudo-pregnancy, with production of all the subjective and many of the objective symptoms of real pregnancy, under the stimulus of a strong desire for children, affords evidence of the power of auto-suggestion. The historical case of Queen Mary is a familiar example.

* A friend of mine was house-surgeon many years ago to Sir James Paget. He was a Plymouth Brother, and felt it his duty to speak seriously and rather terrifyingly to patients after operations. Sir James, himself a man of great piety, forbade my friend's untimely preaching, saying it depressed the patients and 'didn't give his operation a fair chance.' On several occasions I have been asked by surgeons to arouse a hopeful spirit in patients before an operation, and at other times to inspire them with a desire to recover when there was despondency, and even a wish 'to die and have done with it.'

† See 'Life of Mahomet,' by Sir William Muir.

‡ 'Annals of the Early Friends,' by Jane Budge.

strange scene occurred. I was desired to visit one who had been eminently pious, but had now been confined to her bed for several months and was utterly unable to raise herself up. She desired us to pray that the chain might be broken. A few of us prayed in faith. Presently she rose up, dressed herself, came downstairs, and, I believe, had not any further complaint.'

Again: ' Wednesday, 24th April, 1782. So on Friday I got to Halifax, where Mr. Floyd lay in a high fever, almost dead for want of sleep. This was prevented by the violent pain in one of his feet, which was much swelled and so sore it could not be touched. We joined in prayer that God would fulfil His word and give His beloved sleep. Presently the swelling, the soreness, the pain, were gone; and he had a good night's rest.'

Father Ignatius is a recent example of a spiritual leader working semi-miraculous cures, if the testimony of his followers is to be believed.* The Salvation Army holds regular services for manifestation by cure of the sick. Dr. Schofield gives accounts of extraordinary results he has seen.

Some years ago the theosophist leader, Colonel Olcott, described to me a healing tour he made in India in the interest of his propaganda. He seems to have performed some remarkable cures, and he was most candid in his account of his proceedings. His approach to a town or village was always heralded with much ceremony, and people were told to bring out their sick to him. He passed them in review, and selected those he thought fit subjects by a test well known to mesmerizers. Telling the sick person to look steadily into his eyes, he made a few ' passes ' down the body, and if the patient followed the hand he knew him to be susceptible to hypnotism and worth trying suggestion on. The cures, then, were confessedly hypnotic.

The curative effect does not always depend upon the truth of the tenets preached, for false prophets have also

* ' Life of Father Ignatius,' by Baroness de Bertouch.

been successful healers. For instance, Brigham Young had a great reputation in that line among his disciples, and Myers quotes the following amusing illustration of his astuteness: One of his followers, a farmer, living hundreds of miles away, lost a leg through an accident, and so great was his faith in the prophet that he journeyed to Salt Lake City, feeling assured that Brigham Young could restore it to him. 'Why, yes,' said the prophet, 'I can restore it; but it is for you to consider whether it is expedient, for if I give you back your leg, you will have two legs until you die, which will be a great convenience; but in the resurrection, not only will the leg you lost rise and be united to your body, but also the one I give you: thus you will be encumbered with three legs for ever, and it is for you to decide whether you will take the inconvenience of the one leg now or three legs through eternity.' The man chose the present inconvenience, and the prophet retained his reputation.

All these examples show that the chief curative factor is the faith of the patient, which, if aroused to a certain point, seems able to set up a healthy and healing reaction. When touching for the king's evil was practised by two rival kings—for instance, James II. and William III.—I imagine it was only the monarch deemed legitimate and possessed of divine right who worked the cure.*

* Miss Mary Hamilton, M.A., Carnegie Research Scholar, has written an interesting volume ('Incubation in the Cure of Disease in Pagan Temples and Christian Churches,' 1906) on incubation or temple sleep as practised in ancient Greece and Asia Minor, Italy and Egypt. The sick person was laid in the temple at night, and the god visited him in his dreams and cured him of his disease. The dream often took the form of a vision of the deity, who sometimes touched the afflicted part, and sometimes spoke words of comfort or assurance. The cured patient proclaimed his gratitude on tablets, many of which remain to this day and can still be read. The cures recorded were chiefly of affections of the eyes, blindness, paralysis, internal tumours, old wounds, rheumatism, and gout. The following are typical cases: A blind man came to the temple of Asklepios in Epidauros. One of the eyes had not even a trace of a ball, and the socket was completely empty. Some of those in the temple said it was folly to think he could recover his sight, but he became a patient and slept. In his sleep the god appeared, and prepared some drug which he poured into the eyes. In the

It is hard to tell how much the personality of the healer exerts a direct effect. Many people think there is some telepathic influence at work. Belief in himself and his mission seem necessary qualifications of a successful spiritual healer, as they are of all men who influence their fellows by authoritative suggestion. Even the quack brings himself to believe in the efficacy of his treatment, and I cannot imagine the sceptic or cynic effecting psychical cures. In the first place, his scepticism would be reflected in his actions, and would prevent the necessary uprush of faith in the patient. We know of medical men who have lost faith in themselves and their remedies. Their position is a sad one, and they would be well advised to choose another calling.

We know how in impressionable persons the idea calls up the sensation. Thus, talking or thinking of ants or fleas may produce irritation of the skin and formication, recollection of a certain dish may reawaken its savour, and expectation of hearing a bell ring may so act on the

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morning he awoke and found the sight of both eyes restored. A chronic invalid and martyr to dyspepsia was quickly cured by following the god's instructions as to diet, bathing, and exercise. A man with paralysis of the knees saw a vision of the god in a chariot which he drove over him, so that the horses trampled him under foot. In his sleep he stood upright, and in the morning he departed cured. The priests used to impress the patients by making them go through elaborate preliminary ceremonies and invocations, and they exacted large fees. Sometimes, it is stated, when the fee was not satisfactory, cure would be delayed or a relapse would occur.

When Christianity triumphed over paganism, many of the heathen temples, Miss Hamilton says, were converted into Christian churches, and cures of the same kind continued to be worked in them in the name of the saint who took the place of the god.

One cannot fail to be struck by the similarity of the cures effected in ecstatic and hypnoid states in all times and under diverse conditions. The vision of a bright light and the hearing of a voice are common accompaniments; and the cures are, generally if not invariably, instantaneous or very rapid. Though the accompaniment of an impressive environment is most conducive to cure, this result is sometimes brought about by spontaneous ecstasy, as in 'The Herne Hill Miracle,' much advertised in the daily papers, and fully described by Dr. Edwin Ash ('Faith and Suggestion,' 1912).

auditory centres as to produce a subjective tintinnabulation. The suggestion of a person's presence may call up his image, as in the well-known story told by Dr. Wigan. He was in Paris, and at a reception given shortly after the execution of Marshal Ney. All the world was talking about the deceased general and his tragic end, when the servant threw open the doors and ushered in a gentleman whom he announced as 'Marshal Ney!' A dead silence came over the company, and a shiver ran through them as they glanced towards the door, and so strong was the mental picture conjured up by the servant's blunder that many of those present seemed to see the familiar figure stalking into the room. These examples serve to show how suggestion in the waking state may produce tactile, auditory and visual images by direct action on the highest centres, and they give us some clue to the phenomena observable in the states of hypnotism characterized by heightened suggestibility. In the motor sphere we find the same phenomenon. The thought or idea of dancing often causes the feet to move in rhythm, just as the idea of a combat may lead us to clench the fist.* The thought-reader's success generally depends on the fact that the idea upon which the subject's mind is intensely fixed is betrayed to the practised 'medium' by unconscious and involuntary muscular movements.

But it is unnecessary to multiply instances showing the influence of the mental states over bodily functions, as everyone must have numberless examples of it in his own

* Hypnotism greatly increases the ideo-motor association, as is shown by Professor Pitres, of Bordeaux. He hypnotized a young woman named Celestine, and she at once passed into a condition of profound trance, in which she lay motionless and expressionless. He asked what she was thinking of, and she replied, 'Nothing,' and her face showed no sign of intelligence. She was then placed in a kneeling position, with her hands clasped, and immediately her face, previously so dull and apathetic, lighted up, and assumed an aspect of devotion resembling that seen in religious ecstasy, while her lips were seen to move. 'What are you doing?' asked Dr. Pitres. 'Saying my prayers,' answered the girl. When asked what she saw, she replied, 'The Virgin,' and proceeded to describe her dress and appearance. The attitude suggested the idea, and the thought produced the hallucination.—Pitres, *op. cit.*, p. 155.

person. Mental discouragement and depression have as their accompaniments disinclination for exertion and very frequently a sense of bodily fatigue. Who has not felt such a combination of symptoms after disappointment and worry, and does not know that the removal of the cause is followed by immediate removal of the effect? A letter saying that the friend we mourned as about to die has recovered, or that the investment we thought hopelessly bad has turned out a brilliant success, not only removes the mental symptoms, but also seems to put new energy into our actions. The sense of fatigue vanishes, the muscles become braced up, and there is an immediate demand for an outlet of energy which has been liberated by the removal of the inhibitory effects of despair. The counterpart is equally apparent, for we know and have experienced the effect on the depressed and wearied mind of a game of tennis or billiards, or any form of effort which acts as a derivative by calling off nervous energy from overworked and enfeebled centres into other channels and fresh combinations. The philosopher is indifferent to privation and suffering because he is able to direct his thoughts into channels which are not affected by the ups and downs of ordinary life, and his philosophy is practically the outcome of the development of his power of inhibition.

The lesson the study of mental suggestion teaches is not that disease is imaginary, but that the imagination has a powerful influence over its manifestations, which should be recognized and made use of. Here come in the training and skill of the physician, and it is the want of these which causes the amateur and quack to come to grief. When an army surgeon is quite sure that a soldier is malingering, he has no hesitation in punishing him and returning him to duty; but he must make sure of his ground. A few years ago I read of a man falling dead on parade at Aldershot. He had reported himself sick, but the surgeon, after a perfunctory examination, passed him as fit for duty. The man was really ill, as the event

proved. The soldier died, and the surgeon was requested to send in his papers. So in treating an organ or function, let us first make sure of our diagnosis, and then we can safely employ our remedies—material, mental, or both.

Hypnotism in some cases enables us to do for our patients what the philosopher can do for himself. 'It seems the only kind of therapeutic power that can penetrate a certain obscure province of pathology at all. When the senses practise strange tyrannies over the emotions and the will, or when the imaginative and intellectual powers maltreat the body with suppressed treacheries and revolts, suggestion alone seems able to interpose in the confusion of consequent suffering. The dualism of the remedy matches the dualism of the treated malady.'* The case of Mrs. E——, quoted on p. 320, is an example of this.

I have recently seen a lady whose condition is in some ways a typical example of the connection between mental states and bodily functions. She is a woman of thirty-five, and is married and has children. She has no organic disease as far as can be ascertained, and spends more than half her time happily and naturally. But she is subject to attacks of melancholia, and these generally come on every three or four weeks, and last about a week. She goes to bed feeling well, but awakes utterly dejected and miserable after a disturbed sleep of two or three hours. Her whole appearance undergoes a change; she looks much older, her complexion becomes muddy and sallow, and her skin dry and harsh, her eyes dull and heavy, her attitude and gait stooping and slow. The timbre of her voice alters, and her speech becomes slow. At the same time the bowels become obstinately confined, and the water high-coloured, thick, and scanty. She also suffers at these times from constant frontal headache and loss of memory. During the attacks she suffers from insomnia, and, when she does sleep, she has disturbed dreams, and is restless and agitated. It is interesting to note that she is naturally of an unusually bright and energetic temperament, and systematically overworks and strains herself. She comes of a neurotic family, and was scrofulous as a child. The attacks are often preceded by a period of unusual excitement and mental activity. In this brief sketch of a not unusual condition one sees the close connection between mental states and bodily functions, and it is not easy to say whether mind or body is the primary seat of disturbance. I am disposed to think that the symptoms depend on exhaustion of nervous energy

* Wingfield, *op. cit.*, p. 170.

in the highest centres of the cortical area, and that this exhaustion affects not only memory and sleep, but also nutritive and secretory processes.

Dr. T. W. Mitchell relates how a patient of his had, as alternating states, mental depression with terrifying dreams and functional hemiplegia.*

* *Soc. Psych. Research*, Medical Number, November, 1912.

CHAPTER III

Power of Mind and Body increased by Concentration of Attention and Energy.—Suppression of One Faculty tends to increase the Development of Others.—Concentration of Mind on One Idea in Somnambulism, and Performance of Tasks impossible when awake.—Some Tragical Results of Natural Somnambulism.—Artificial or Hypnotic Somnambulism may be turned to Therapeutic Purposes.—Natural Sleep may pass into Hypnotic Sleep, and *vice versa*.—The Faculties may be aroused and intensified in Hypnotic Somnambulism.

I HAVE endeavoured to show how much the imagination (in its widest sense) may have to do with the health of mind and body; and I shall now try to point out that the effects of 'directed consciousness' are greatly increased under certain conditions, when the mind is so withdrawn from the consideration of all extraneous ideas as to be absolutely concentrated upon one object.

We have seen how concentration of mind-faculty, whether self-induced or brought about by some shock to the system, or some powerful external influence, can modify functions, and both produce and cure disease—sometimes gradually, but often, in the case of shock or sudden and overpowering influence, with a rapidity which seems almost miraculous.

We all know, and frequently by our own experience, that mind-concentration, brought about by some strong motive, will enable us to perform mental or bodily actions of which we would generally be incapable. Through it a man will achieve feats of strength far beyond his apparent muscular power, or will go boldly through dangers from which he would shrink if he paused to consider probable consequences. Or he will, in a limited time, execute a

prodigious amount of intellectual work, possibly of such startling excellence that he himself, in after-moments of less intensity, will be amazed at his own performance. Of course, concentration, if sustained at such a pitch, would in time be the ruin of mind and body; but we know that it is a necessary factor in the accomplishment of all great things, and that there can be no success in life for those who cannot command it to a moderate degree.

As a rule, happily, the organic functions which carry on life are purely automatic; but, as we have seen, it is possible to concentrate the attention upon them, and so affect their operation, sometimes beneficially, but far more commonly with detriment to the health of mind and body. Those bodily movements over which we have full control are also generally performed automatically. Under ordinary circumstances, we give no conscious thought to our steps in walking, to the motion of our hands while at work; these are nearly as automatic as healthy breathing. So likewise, in a general way, is the operation of the senses. We see, hear, feel, without any effort of our will, unless some special motive impels us to exercise it. We concentrate our minds upon sight when we strive to see a minute, or indistinct, or distant object; and upon hearing when we listen for a faint or eagerly-expected sound. If such concentration is continuously brought to bear upon any sense, it will in time convey automatically the more intense impression which has been exceptional. Thus, in savages and in travellers and settlers in wild or dangerous regions, the senses of sight and hearing are far more keen than in those who live under civilization. The senses of touch and hearing become exquisitely fine in the blind. A blind man will sometimes hear sounds which are absolutely inaudible to ordinary ears, and recognize objects by touch as correctly as most people can by eyesight. Some blind persons seem, through concentration, to have developed a sense of space. On entering a room they can tell whether few or

many persons are present; they can guess with wonderful accuracy the size and shape of an enclosed place, and have a curious power of avoiding any obstruction, such as an article of furniture, which may be in their way.* Laycock relates how blind persons are able to recognize their friends by touch alone, and cites several instances in which, from a subtle comparison of form, smell, texture, etc., they have been able to form correct ideas about colour. In the well-known case of Caspar Hauser, who was brought up in solitude and darkness, all the senses were of extraordinary acuteness, so that he could distinguish colours in the dark and hear sounds inaudible to other people. The more recent example of Laura Bridgman must be familiar to most readers. Though blind, deaf, and dumb from infancy, she possessed great intelligence, and kept up close relationship with the outside world through the development of the sense of touch. She was able to recognize her friends after months of absence by the touch of their hands. The history of another American blind, deaf, and dumb girl, Helen Keller, recently told by herself in her autobiography, is, however, the most striking of all these stories, and shows how the highest education may be won through the exercise of one sense only, when the brain-power of genius is existent but latent. She has graduated in honours at the University, and speaks several modern and ancient languages. She is able to follow conversation accurately and rapidly by keeping her finger on the speaker's lips and noting their movement. Professor Binet investigated the case of a hysterical girl who, when blindfolded, could discriminate and describe the relieved surface of an unknown coin when pressed against the skin. He reckoned that she possessed in this respect fifty times the normal amount of sensitiveness. Hyperæsthesia of the special senses is not of un-

* Most people have probably noticed that closing the eyes will, for the moment, render the hearing and touch unusually acute. Any sense may be intensified by mind-concentration, as in the case of tea and wine tasters and of professional buyers of raw silk, who develop an unerring capacity of judging its quality by touch.

common occurrence in hysterical subjects; and I have met a young lady whose nights were rendered miserable by the noise made by billiard-balls used on a table at least fifty yards away, and quite inaudible to ordinary persons. Smell is almost a lost sense with a large proportion of civilized mankind, but in many hysterical and neurotic subjects it is developed to an even painful extent, so that persons and things are readily distinguished by their odour. Such sensory hyperæsthesia is readily produced in the hypnotic state by suggestion, and explains many supposed instances of clairvoyance. Dr. Ralph Vincent relates how at Oxford he used to hypnotize undergraduate friends and make them pick out gloves belonging to different persons just as a dog does; and in the Brighton experiments of the Society for Psychical Research, subjects hypnotized with their eyes open were able to select cards from the pack quite indistinguishable in their waking state.

Concentration of mind upon intellectual or physical action is usually possible only in our waking and wakeful moments. Fatigue of brain renders us incapable of it; and in sleep, the natural consequence of such fatigue, we generally lose consciousness, and only exercise those functions which are performed automatically. In dreams consciousness is once more aroused, and we may even use some reasoning power, and be influenced from without through our senses. But in ordinary dreams there is no concentration of ideas upon an act to be performed or a goal to be reached. When a sleeper uses this effort of mind, he passes out of the region of dreams, and enters that of somnambulism.

In somnambulism actions of extraordinary difficulty, such as could not be performed by the sleeper during his waking hours—except, perhaps, through mind-concentration caused by some overpowering impulse or motive—are accomplished with perfect ease. Persons in this condition will walk on the extreme edge of a precipice, climb dangerous heights, get out of a house through an upper-

story window. There are numerous instances of this on record, of which I will quote two or three. Dr. Paul Garnier* gives one of a patient, a dentist's assistant, of feeble bodily and mental health, who frequently fell into a state of somnambulism. On one of these occasions he escaped by a window from the ward of the Hôtel Dieu, in which he was undergoing treatment, and, though a peculiarly unathletic person, walked easily and fearlessly along the sloping parapet of the façade—a feat which a trained gymnast could hardly have accomplished. He awoke in the course of this dangerous performance, and had to be rescued by means of a ladder. With the return of consciousness reason awoke, and he understood the horror of his position. While blindly obeying his impulse he had acted automatically, and fear, which is a product of reflection and association of ideas,† had no existence for him. Nevertheless, it is a popular error to suppose that somnambulists are safeguarded from accident. Reference to the daily papers tells a different tale, and hardly a week passes without a serious or fatal accident happening to a sleep-walker. It is, therefore, a matter of congratulation that in hypnotism we possess an almost certain cure for this dangerous and embarrassing affection.

A patient of my own, a young man twenty years of age, not an habitual somnambulist, but a sufferer from nightmare produced by chronic dyspepsia, on one occasion, while spending the night in an hotel, dreamed that he was confined in a dungeon from which he must escape. The dream, no doubt, passed into somnambulism, for under its influence he broke his iron bedstead—a feat of strength which, waking, he assuredly could not have accomplished —and tore up his bedclothes. His amazement was great when he awoke in the morning amid the ruins of his own creation. He remembered his dream, but had no recol-

* 'Somnambulisme devant les Tribunaux,' Paris, 1888.

† Infants, in whom, of course, neither is possible, will, if allowed, grasp at the flame of a candle, or a sharp instrument; and young children will fearlessly put themselves into positions of great danger.

lection whatever of the acts into which he had been led by it. The case of Dr. Haydn Brown's referred to on p. 207 is a good example of nocturnal mania of a more serious type.

Dr. Bevan Lewis refers to a case of habitual somnambulism with which he is acquainted. The subject, a medical man, is frequently called up at night to visit patients. He gets up and dresses automatically, but is quite unconscious of his actions and of his destination until he is a considerable distance from his house ('Text-Book of Mental Diseases,' p. 150).

The hypnotic state, which stops short of loss of consciousness, has been aptly compared to that condition between sleeping and waking which is characterized by inertia of mind and body, and by the greater or less abeyance of spontaneity. There is another similarity between the dream state and hypnosis. There are many cases on record, and most medical men must have met with instances in practice, where the morbid condition either took its rise from, or was coincident with, a terrifying or painful dream. Hysterical paralysis not uncommonly commences in this way, and it is probable that certain neurotic troubles take their form from the influence of dream-suggestion. In incipient insanity the delusions which subsequently become permanent and rampant are often at first only experienced either in dreams or in the moments of incomplete wakefulness, and their occurrence is due either to morbid auto-suggestion or to the influence of morbid conditions on the mind in the sleeping state which in waking moments are either not noticed or are corrected by the intelligence. It seems possible for healthy suggestion to combat and conquer many of the conditions which are thus ushered in.

Some years ago I attended a case in point. The patient, a lady of thirty, had always been neurotic, and had suffered from indifferent health. She was, however, able to get through life fairly well until, in September, 1890, she went to stay away from home. In the evening the assembled company set themselves to tell the most blood-curdling stories they could think of, with the result that Miss X—— retired to her room in a state of terror, and with

unstrung nerves. She had to sleep alone, a thing she was unaccustomed to, and this added to her alarm. In the middle of the night the house was aroused by screams proceeding from her room, and when an entrance was made Miss X—— was found in an attack of violent hysteria. When she recovered from the fit she was only able to remember that she had had a terrifying dream embodying the stories she had heard. From that time her health completely gave way; she started at the least sound, ingestion of food was always followed by vomiting, and obstinate insomnia supervened. She underwent a six weeks' course of Weir-Mitchell treatment, from which she derived no benefit, and then, after a further three months of misery, expressed her wish to try hypnotism. She was not an easy subject, as her mind was in such a condition that it was almost impossible to fix her attention, and at first, whenever she felt going off, she could not help pulling herself up with a start. However, perseverance prevailed, and from the moment she was slightly influenced she began to improve. She was restored, after two months' treatment, to about the same state of health she was in before the attack.

Dreams merging into somnambulism may produce tragic results. Dr. G. Tourdes* relates how a man sleeping beside his wife dreamed that she was a robber whom he must kill. He accordingly attempted to suffocate her with a pillow, and it was with great difficulty that she succeeded in waking him, and so saving her life.

In 1843 a young man was tried for the attempted murder of an innkeeper at Lyons.† He had arrived at the inn towards nightfall, and was allotted a room. In the dead of night loud cries were heard from this room, and the landlord, rushing in to see what was the matter, was set upon by his guest and seriously wounded. It was ascertained that the young man was a somnambulist, who had dreamt that the landlord was murdering the occupants of a room near his own, and that he was defending them. He was, of course, acquitted. A case is also recorded by Drs. Guy and Ferrier, in their 'Forensic Medicine.' 'Two men, being in a place infested by robbers, engaged that one should watch while the other slept. But the watcher, falling asleep, and dreaming that he was pursued, shot his companion through the heart.'

* Article 'Sommeil,' 'Dictionnaire Encyclopédique des Sciences Médicales.'

† 'Dictionnaire Encyclopédique des Sciences Médicales,' article 'Somnambulisme,' by Drs. Ball and Chambard.

We have many instances of mental work being accomplished during somnambulism. Professor Woehner,* of Gottingen, after vainly trying for several days to write a Greek poem on a given subject, composed it successfully while in this condition, which probably was brought about by the mental strain of his previous futile efforts.†

It rarely happens, however, that solutions of problems, poems, etc., written by persons in this state have any value. They may begin well, but generally drift into nonsense, probably because the mental concentration has been dispelled by some new idea crossing the first, and displacing it. We hear of the philosopher who dreamt while under nitrous oxide gas he had solved the problem of the universe and hastened to write down his discovery. But when he came to read the script, he only found the words, 'The whole of space is pervaded by the smell of turpentine.'

The effect of natural or accidental somnambulism on the health is anything but beneficial.‡ An attack is generally followed by feelings of weariness and discomfort, for which the subject is at a loss to account. The concentrated mind-power does not operate in a beneficial direction, but impels the sleeper to bodily or mental effort likely to have an exhausting and hurtful effect upon him. But the artificially-produced mental condition seen in hypnotism can be turned to therapeutic uses, and be made to fill a void which no other plan of treatment can reach. Bernheim considers hypnotic sleep analogous to the natural state, with the important difference that in natural sleep the subject is only in relation with himself,

* 'Dictionnaire Encyclopédique des Sciences Médicales,' article 'Somnambulisme,' by Drs. Ball and Chambard.

† Coleridge's poetical fragment 'Kubla Khan' was probably composed in a dream—not in somnambulism—as he remembered and wrote it down on awaking.

‡ Ordinary somnambulism is best treated by hypnotic suggestion. I have cured cases very speedily, and natural somnambulists are generally good hypnotic subjects. This is what one would expect, for by hypnotism a condition is artificially substituted similar in its nature to the morbid one, but controllable by suggestion.

whereas in the artificial state he is in relation with the operator, who is therefore able to direct the thoughts into the channel he wishes. That it resembles natural sleep is proved by the fact that it is possible in certain cases for one to pass into the other. Dr. Van Eeden told me that a patient of his, a gentleman, wearied by long waiting and exhausted by the heat, fell asleep in the waiting-room. The doctor came in, and, seeing him asleep, said, 'Don't wake, but come with me into my consulting-room.' The patient got up and, with assistance, did as he was desired. After the treatment was over he was led back in the same way to his former seat in the waiting-room, and allowed to finish his sleep. He soon awoke, apologized to the other patients for having slept, and expressed surprise that his turn had not yet come for seeing the doctor. Great was his astonishment when he was told that the séance had taken place and was finished without his knowing anything about it. Dr. Maury,* who cannot be accused of being too easily influenced, gives some instances in which, while sitting by his fireside dozing after dinner, he had heard, as in a dream, the words uttered by his wife and friends, and had followed out the train of thought suggested by them in his dreams, and had even acted upon suggestions so made.† If a person is very tired, it is frequently possible to obtain an answer to a question whispered in his ear without awakening him. Hack-Tuke and Braid give several examples of this in their writings.

The close analogy between sleep and hypnotism is shown in many ways. If a person is hypnotized every night, hypnosis may be made to take the place of sleep for an indefinite time, and the only difference observable

* 'Le Sommeil et les Rêves,' Paris, 1865, p. 42.

† He relates how, on one occasion, he was sitting in his easy-chair half awake, when his wife spoke to him. He was awakened by the words, and remembered them, but was quite unable to tell whether he had uttered them himself, or whether they were his wife's. On this he remarks, 'How many actions and ideas are daily suggested to us by others which we act upon, thinking they are our own!'

in the two conditions would be that in hypnotic sleep the patient would not be easily aroused, if at all, and would be *en rapport* with the operator. The experience of one of my patients also points to this close resemblance. When not able to sleep at night, he now repeats on himself the process I used to adopt with him—viz., gentle stroking of the forehead. He tells me this never fails to send him to sleep in a few minutes. It would be interesting to ascertain if the sleep so induced possessed the characteristics of the hypnotic state. It is frequently possible to suggest dreams to the somnambulist. Thus I told an officer to dream that he was in Jamaica, and playing polo at Up Park Camp. When he awoke, he volunteered the remark that he had had a most vivid dream, and proceeded to describe a polo match, of which he had filled in the details without help from me. One need not be hypnotized to have dreams suggested, for Forel tells how he forced a disagreeable dream on a sceptical medical friend who said he didn't believe in suggestion. 'Nevertheless,' said Dr. Forel, 'you will dream of the devil to-night, and wake up in a terrible fright.' His friend laughed at the idea, but the prediction came true.*

As in natural somnambulism a person may be able to do things of which he is at other times incapable, so in the artificially-produced condition he can sometimes be made to excel himself. Beaunis found in experimenting with the dynamometer that the muscular power could be greatly increased at times by suggesting in the hypnotic state increased strength and effort; and one frequently

* The whole subject of dreams has been recently scientifically treated by Professor Freud and his followers, and we have a new psychology evolved therefrom. They contend that every dream has a meaning, symbolic if not apparent, and by psycho-analysis trace it to its source in the subconscious. They hold that a dream is invariably the expression of a wish. The good work done by Freud in this neglected and apparently hopeless field is undoubtedly epoch-making, but his theories are, I think, exaggerated, and his arguments somewhat strained. By such reasoning one can explain anything, from the Baconian authorship of Shakespeare's plays onwards.

finds that the grasp of an enfeebled patient can be perceptibly strengthened by similar suggestions. The therapeutic bearing of this experiment is easily seen.

Dr. Grazzini, of Florence, has kindly sent me some copies of drawings done, while in a state of hypnotic somnambulism, by an uneducated man who in waking moments hardly knew the use of a pencil. These copies are faithfully and well executed, but probably the man would have been quite unable to initiate a design. The faculty of imitation was strengthened by the hypnotic condition, and at the same time he concentrated all his attention on the figures, and took infinite pains to reproduce them. I have frequently told somnambulic subjects that on awaking they are to write such and such a sentence with their left hand, and have invariably found the task accomplished fairly well, though in many instances I have heard the same person before the operation declare it impossible, and found him unable to make an intelligible letter. This may prove a practical hint in the case of left-handed children.

An artist under the same circumstances would no doubt produce a drawing in his usual style; and a musician, in a similar way, if asked to play, would perform some familiar air. Whatever a man's natural disposition might be, it would come out if he were in a state of profound hypnotic sleep; but we shall see that ' suggestion ' in this condition has power to modify even lifelong habits and deep-rooted tendencies.*

* Frequent repetition of the suggestion, especially if done with confidence, has what may be called a cumulative action, expressed by Delbœuf in a kind of mathematical formula. This, of course, is also the case in our waking moments, and is well understood and turned to account by advertising tradesmen. The announcement in confident language on every blank wall, that ' Johnson's soap is the best,' becomes, by constant repetition, almost an axiom, and we are inclined to accept its truth. In the same way it is told of George IV. that from constantly repeating the story of his being at Waterloo he at length got to believe that he had really taken part in the battle.

CHAPTER IV

Dr. Liébeault, of Nancy.—Description of his Treatment.—System free from Mysticism.—Curative Suggestions.—Explanation of the Phenomena.—Definition of Hypnotism.—Absolute Sleep or Unconsciousness unnecessary for Curative Treatment.—Theory of Professor Charcot not accepted by the School of Nancy.—Proportion of Persons hypnotizable and Degrees of Hypnotic Influence.—Phenomena of Somnambulism outside the Sphere of Psycho-Therapeutics.

I HOPE to have shown in the preceding chapters that Liébeault's system is the outcome of the collection and classification of many isolated facts previously neglected or misunderstood. That cures have been and still are worked by such means as are implied in faith-healing, the mind cure, etc., and by charms and relics, is beyond doubt; but it is not in the supernatural that we should seek for the explanation of them. They all proceed from the same cause and on the same lines. We have, first, the patient's strong desire for cure; and, secondly, his firm belief in the efficacy of the means used; while to these may generally be added the presence of a sympathetic and impressive environment. The reasonable and deliberative side of the patient's brain is suppressed, while the emotional or instinctive side is developed, and in proportion as the latter is predominant the greater generally is the success of the treatment. The Nancy school obtain, in suitable cases, as good results as it is possible to expect; but they work on scientific principles and by recognized laws.

A brief account of the treatment practised at Nancy,

and of the theory which explains it, will, I think, make this clear.*

If the visitor to Dr. Liébeault's dispensary was one who measured results by the impressiveness of the means used, he will surely have been disappointed to find how commonplace were operators, patients, and buildings. The rooms were unpretentious and even shabby; the patients were ordinary-looking people enough, belonging mostly to the artisan and labouring classes; and the doctor himself, though he had goodness and kindliness written on every feature, was of unimposing presence; while his habit of chatting on all sorts of subjects with the persons around him, even while receiving patients, had an odd and hardly impressive effect.

The patient paying his first visit was directed to sit down and watch the treatment being applied to others. This gave him confidence, and aroused that imitative faculty which is so active in childhood, and is never lost throughout adult life. When his turn came, he was told to take his place in an arm-chair, and to make his mind as much a blank as possible—' to think of nothing at all '—and to fix his eyes and attention on some special object: generally the doctor's fingers held a few inches above the eyes. Then the phenomena which attend the oncoming of natural sleep were gradually ' suggested ' to him: ' Your sight is growing dim and indistinct; your eyelids are becoming heavy; a numbness is creeping over your limbs; my voice seems muffled to you; you are getting more sleepy; you cannot keep your eyes open.' Here the eyes closed of themselves, or were closed by the operator, and it was generally found that the patient was indeed asleep.

About two minutes of this ' talk about sleep ' usually produced the hypnotic effect on a new patient; and on subsequent visits even less time was required.

* Dr. Rolleston gives an interesting account of a visit to Nancy in St. Bartholomew's Hospital Reports, 1889, and Sir Francis Cruise describes his visit in the *Dublin Journal of Medical Science*, May, 1891. See also the account of a visit to Liébeault's clinique by Sir Lauder Brunton in his book, ' The Action of Medicines,' p. 227.

The patient being more or less influenced, Dr. Liébeault then proceeded with the treatment proper. This consisted essentially in directing the invalid's attention to the part affected, and suggesting an amelioration or disappearance of the morbid condition and symptoms. To take a very simple case—let us suppose that the malady is chronic nervous headache. The part of the head affected was gently rubbed, so that the patient's attention would be attracted to it, and he was told that the pain was to disappear—that he would awake feeling his head cool, clear, and comfortable, and that there was to be no return of the trouble. In ordinary cases the whole process would not have lasted more than five minutes when Liébeault brought it to a close by arousing the patient by telling him to open his eyes and awake. This was generally enough; he awoke as from ordinary sleep, and was told to vacate the arm-chair in favour of the next patient. When asked how he felt, he would generally reply that he was better, and very often that the pain had entirely vanished. He was quite his natural self, and could leave the room at once and go about his work as usual. Long acquaintance with the system prevented an inhabitant of Nancy from regarding it as anything remarkable, and a sick person consulted Dr. Liébeault just as he would consult any other physician, with the simple idea that the treatment would do him good. He did not trouble himself with metaphysical theories, but was content to know that some acquaintance had been cured of a complaint similar to his own, and that he himself hoped to be relieved in a few days. Liébeault generally placed his hand over the epigastrium, and applied gentle friction, suggesting as he did so a sensation of warmth. He regarded a responsive glow as almost essential to the success of subsequent treatment, and it is the first link in the chain which constitutes *rapport* between physician and patient. The fulfilment of the first suggestion tends to augment the patient's confidence, and leads to the more ready reception of those which follow. This point is one

of great practical importance, and we generally feel that we can do good when we can induce this responsive warmth, no matter how slight the hypnotic influence may be. The feeling is quite different to that produced by simple friction, and requires to be felt to be appreciated. The magnetizers attributed it to the passage of magnetic fluid from them to the patient; but, as we regard all the manifestations of hypnotism as subjective, we must of course seek another explanation. This is found by supposing that the sensation is due to action on the vaso-motor system through the solar plexus, allowing a sudden afflux of blood to the part. The warmth is not merely imaginary, for it is appreciable to the touch and by the thermometer, and is, in fact, analogous to blushing.

If the hypnotic sleep has been profound, it may be necessary twice or thrice to repeat the order to awake, and even to enforce it by fanning the patient, or blowing gently upon his eyes; but the simple command is nearly always sufficient.

There certainly is nothing mysterious in all this, and Liébeault seemed to take pleasure in making his whole mode of treatment clear to any serious inquirer, and in giving the rational explanation of everything that he did. He directed the patient to fix his attention on a certain point in order to strain the accommodation of the eyes and tire the sight. The effect of the strain is to cause dilatation of the pupils, and consequent dimness of vision. The feeling of heaviness in the eyelids results from the fatigue of keeping them open in a strained position, and the assertion that the eyes are becoming tired and the sight dim is therefore founded on physiological data, and is not guesswork. The eyes being tired, the natural impulse is to close them, and this act calls up a previous association of ideas connected with fatigued or confused sight. That association points to sleep, towards which the patient is rapidly led, aided by the monotonous tones of the operator suggesting it to him, and by his mind being free from all disturbing thoughts, and his nerves

from all external stimuli. He falls asleep, in fact, much in the same manner as one does when reading a dull book or listening to a not too brilliant discourse. Maury, in his well-known book on sleep and dreams, says: 'The less the mind is occupied with ideas, the more easily can the thoughts be directed into any given channel. If nothing claims our notice or holds our attention, the cerebro-spinal system, for want of that gentle stimulation which is necessary to it, falls into a state of semi-torpor inseparable from atony of the nervous system.'

In the chapter on sleep in Carpenter's 'Physiology' various conditions are mentioned as being favourable to it, one being the desire for it, another the expectation of it. We expect, from previous experience, that if we lie down in a certain place, sleep will follow. The faculty of imitation helps to bring it about; when we see others dozing, we naturally incline to follow their example, and at night the consciousness that all around us are asleep disposes us to seek the same condition. Talking about sleep is apt to induce somnolence, just as talking about food may provoke hunger. And a monotonous sound, such as a droning voice of a speaker, or the breaking of gentle waves upon the seashore, tends to encourage slumber. Thus it will be seen how closely the artificial method I have described follows natural rules. This method may fail, just as we may fail to obtain natural sleep, or may battle it off should we desire to remain awake. If a patient wishes to resist the somnolent influence, he can do so by refusing to concentrate his thoughts, or by inducing some physical discomfort—for instance, by placing himself in an uneasy position. Strong emotion, such as anger or fear, will prevent the hypnotic sleep; so will severe pain, hunger, thirst, and, indeed, anything which preoccupies the mind or agitates the nervous system. Constitutional idiosyncrasies affect this just as they affect the normal sleep. The naturally restless sleeper will be restless, and he who commonly goes off as soon as his head touches the pillow will quickly

succumb to the hypnotic influence. The extent to which a person is influenced varies according to his mental and physical condition. If he is of restless and flighty temperament, it may be impossible to fix his attention for even the few minutes that are necessary, and no effect is produced—except, perhaps, an inclination on his part to treat the whole affair as a jest, and a consequent irritation on the part of the doctor. But in ordinary cases some effect is certainly produced, if not on a first visit, still on subsequent ones. This effect will vary in various patients, some feeling only a heaviness and torpor, with a disinclination to open the eyes, while others fall into a more or less profound sleep, or into a state of somnambulism. Liébeault divides the sleep into six different stages,* but as these really merge imperceptibly into each other, the division is purely arbitrary, and is made for convenience in classification. They may be shortly summed up as: (1) Light sleep; (2) profound sleep; (3) somnambulism.

The first and second stages closely resemble and are analogous to ordinary sleep; but the third is *sui generis*, and will require a few words later on. Though it is analogous to natural sleep, there is one very important fact which shows that the conditions are not identical. If an ordinary sleeper is spoken to, he is generally aroused by the stimulating effect of the sound conveyed to the brain through the auditory nerves, but one in the hypnotic state may be talked to without being disturbed; the effect will, on the contrary, be soothing. He is, in fact, *en rapport* with the outer world, though only to a limited extent, whereas in natural sleep he is *en rapport* only with his own consciousness.

Upon this difference depends the possibility of applying curative suggestion. Carpenter (*op. cit.*) says that the very closure of the eyes renders the other senses more acute; and we have seen that the inactivity of one sense is nearly always compensated for by increased sensitiveness of the others. Now, in the hypnotic state all the

* See Appendix, p. 371, note 8.

senses are more or less torpid and in abeyance until called into play by the operator. Physiologists suppose that during activity the nerve centres are continually discharging nervous energy in all directions, in response to stimulating impressions received through the senses; but in sleep a state of inactivity is induced, and the nervous force accumulates in the brain cells. Natural sleep comes as a consequence of fatigue, and because the store of nerve energy is nearly or entirely exhausted. During its continuance a fresh store of nerve energy will be laid up, and if it be undisturbed, the store will go on increasing until sufficient is acquired for complete nerve recuperation. This point attained, the sleeper, if in good mental and bodily health, will awake naturally, and feel no further desire for slumber. But as the hypnotic state may be produced at any time in the twenty-four hours, and long before any perceptible inroad has been made on the store of nerve energy laid up during the previous natural sleep, it follows that during the artificial sleep there may be great accumulation and excess of energy. All this can be concentrated and directed into any channel the physician may desire; and this concentrated and directed nerve force must naturally affect the system more powerfully than any ordinary nervous impression. This fact may explain the rapid production of congestion to a given part (alluded to in Chapter V.), and also the sensation of warmth usually experienced in any part to which the attention has been drawn. It also accounts for the success of the treatment in some cases of paralysis of long standing.

We may imagine in such a case, and the surmise would probably be physiologically correct, that the nervous channels are blocked to ordinary impulses sent to them from the brain, but that the extraordinary impulse from an accumulation and concentration of nerve force is sufficient to break down and overcome the obstruction, as a dam which easily withstands ordinary currents is swept away upon the bursting of a reservoir by the rush of accumulated water.

Bernheim defines hypnotism as *the production of a psychical condition in which the faculty of receiving impressions by suggestion is greatly increased.* But this is only half the truth; for not only is the receptivity increased, but the power to act upon and carry out the suggestion is increased likewise. Suggestions have all the force of commands, and the patient will strain every nerve to obey them. They are received as true, and the idea tends to be realized and to be carried into execution as action. If he is told to move a paralyzed limb, or to speak after months of loss of voice, one can see what intense effort he puts into the attempt to comply. A stammerer making such effort will speak fluently, and a deaf person will distinctly hear a whisper. To express adequately the cause of such effects, the word 'suggestion,' in English at least, is far too weak, and therefore somewhat misleading. In the very excellent translation of Forel's book by Dr. Armit the terms 'dictation' and 'to dictate' are sometimes substituted. The truth is that the successful physician uses dictation (command) or suggestion (persuasion) according to the necessities of the case. He treats the patient, and not merely the disease.

The increased force of suggestion does not depend so much as one might suppose on the profoundness of the sleep. In applying it, all that is necessary is a state of increased receptivity of ideas suggested by the operator, and an ignoring of other impressions. I have defined hypnosis as *a condition of increased suggestibility obtained by artifice.* This attained, it matters little from a therapeutic point of view whether light sleep, profound sleep, or somnambulism is produced. My own experience, like that of all observers whom I have known, is that good results are effected when there has been no loss of consciousness, and even when the patient denies having felt any hypnotic influence.* Dr. Arthur, when at the East End Wesleyan

* A gentleman whom I have treated for various nervous affections always denies having slept, and protests that he has remained conscious of everything going on around him. Yet if I

Mission, showed me a case of obstinate intercostal neuralgia after shingles cured in a single sitting, though the patient, a seafaring man of over forty, barely felt a slight degree of somnolence. He could have opened his eyes at any moment, but—and this is the important point—he was very conscious of a glow of reflex warmth when Dr. Arthur passed his hand over the seat of pain and suggested it.

Consciousness is lost only in the advanced stages of profound sleep, and even when this has occurred there is often partial remembrance on waking of many things that have happened during the sleep. A patient in profound sleep may be questioned, and will probably return answers, unless the question be put too brusquely, when it will be likely to wake him, or too gently, when he may shrink from replying; for a person in this state dislikes being disturbed, and is especially unwilling to exert his reflective faculties. Nevertheless, if questioned as to his complaint, he will describe his symptoms truthfully, and thus may help the physician in his diagnosis and treatment.

Bernheim seems to accept the theory of Herbert Spencer, and of most psychologists, that two sorts of nervous action go on within the brain—the one automatic and instinctive, the other rational, volitional, and deliberative. Hypnotism suppresses the latter (the *Ego* of some psychologists), and allows full play to the former. It follows that, where the second kind of nervous action prevails in an individual, he is less liable to be acted upon by external impressions, and is less the creature of impulse than one in whom the first kind is predominant. The more a man's actions are the result of impulse rather than of reason, the more susceptible he is to external impressions, and therefore to suggestive treatment.*

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put some small article, such as a paper-knife, into his hand during the sleep, and tell him to hold it tightly, he will do so, and on being aroused will show surprise at finding himself grasping it.

* He who obeys his instincts, and instantly knocks down a man who has insulted him (this being a purely automatic action), would thus be a better subject for hypnotism than he who de-

This brings us to the question, Who are the best subjects for the treatment, and how far is it applicable to the bulk of mankind?

The late Professor Charcot asserted that it is suitable, and indeed possible, only for hysterical subjects, and that hypnotism is a pathological condition, or induced neurosis. He divided the hypnotic sleep into three well-defined stages: (1) Lethargy; (2) catalepsy; (3) somnambulism; and contended that there is a regular sequence in these, and that, according to the will of the operator, one or other can be produced.

He obtained a state of lethargy by fixing the patient's eyes on a given point, or by gentle pressure on the eyeballs. This state resembles natural profound sleep, but is distinguished from it, and from all other conditions, by a characteristic feature—neuro-muscular hyperexcitability; *i.e.*, if one presses a nerve, the muscles supplied by that nerve will be put into action, and if a muscle is stroked or pressed, it will contract. Thus, pressure on the ulnar nerve will, in Charcot's subjects, produce flexion of the third and fourth fingers, abduction of the thumb, extension and separation of the first and second fingers. It passes into the second stage when the eyelids are opened; cataleptic rigidity may now be produced in a limb, and it may be bent or placed in any position. Moreover, emotions corresponding with the position are evoked. If the subject is put into a pugilistic attitude, his expression will become fierce and determined; if into one of prayer, he will wear the aspect of devotion. Moreover, if only one eye be opened, one-sided catalepsy is produced, and the other side remains lethargic. A bright light or sudden noise will also produce this condition, and in closing the eyes the subject falls into lethargy. The third stage is

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liberately calls a policeman and goes in for damages. Freud lays great stress on the importance of effective 'abreaction' to stimulation, and much ill-health is undoubtedly due to 'bottling up' our feelings. Some authorities attribute the greater prevalence of nervous troubles in women to this restriction of emotional outlets.

produced from the first or second by gently rubbing the top of the head, when the cataleptic condition will vanish, and other characteristics will appear, chief among which are abnormal acuteness of the senses, and obedience to suggestion.

Though I have completely failed to find these three stages in any of my somnambulic subjects, and though the experience of most observers is of an equally negative character, I am not prepared to say that they do not occur in a few hysterical subjects without suggestion. Dr. Grazzini, of Florence, and Dr. Barwise, of Blackburn, tell me that they have elicited them spontaneously.

Liébeault, Bernheim, Beaunis, and others of the Nancy school, deny the existence of these three stages. They assert that their experience in treating hypnotically a vast number of patients leads them to the conclusion that nothing resembling them has been or can be evoked *spontaneously*. They consider, in fact, that Charcot introduced a new hysterical condition into the Salpêtrière, and that this became, as it were, an institution of the place which every new-comer hastened to comply with. They support this assertion by showing that when they in their Nancy practice explained to hysterical patients the effects produced by Charcot, the three stages, never before manifested, were forthcoming. Bernheim has well said: 'Méfiez-vous de la suggestion'; and an English physician has given an equally sage warning: 'Take care, or you will find what you are looking for.'* Charcot thus entered

* Braid was at one time misled into supposing that by touching the phrenological 'bumps' he produced corresponding effects. For instance, if he touched the 'bump' of Destructiveness, the subject immediately proceeded to hit out and to destroy whatever was within his reach; if that of Benevolence, he would give away his watch, purse, etc., to any bystander. The fact is, that the sense of sight (under the apparently closed eyelids), that of hearing, etc., are so abnormally acute in somnambulists, that the slightest hint of expression, voice, or touch, is sufficient to evoke from them the desired response. Some of us remember the flourish of trumpets which heralded the introduction of treatment by suspension for locomotor ataxy and other spinal diseases. Elaborate theories were put forward to explain the results, but Bernheim early in the day attributed them entirely to suggestion,

the field weighted with a theory which he seemed unable to shake off. If one of his school is shown a broad-shouldered navvy or a sun-dried old soldier in a state of profound hypnotic sleep, and is asked whether this looks like a hysterical subject, he will reply that appearances are deceptive, and that the very process of hypnotizing has developed a latent condition of hysteria, or one analogous to it.* The discoveries of Charcot in physiology and pathology fully entitle him to the world-wide reputation which he enjoys; but the attitude he chose to adopt towards hypnotism is unfortunate. By attaching undue importance to *le grand hypnotisme*, as seen in his subjects at the Salpêtrière, and by ignoring what his school calls *le petit hypnotisme*, and confining his researches to hysterical cases, he has retarded the progress of rational hypnotism.

Of the considerable number of medical men I have met who have attended Charcot's demonstrations, not one has looked upon hypnotism as more than a toy, and not one has adopted it for the treatment of disease; whereas nearly all those I have met who have studied the subject at the cliniques at Nancy have been thoroughly convinced of the value of the treatment, and have adopted it into their practice.† To my mind, the great merit of Liébeault was

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and demonstrated the efficacy of the apparatus when the patient had it applied lying down without any nerve-stretching. Every hospital and every neurologist's consulting-room was fitted with the apparatus. But who hears of it now ? It has gone the way of Perkins's tractors.

* The fanciful method adopted by Charcot to produce the hypnotic state may give rise to unexpected results. Some of his highly 'educated' subjects fall into a state of catalepsy if a bright light is suddenly turned full on their eyes, and by the action of this excitant a hysterical patient of his was lately taken *in flagrante delicto*. She had stolen into a room, gone to a chest of drawers, and actually placed her hand on a coveted photograph which she intended to abstract, when a bright ray of light shot through a chink direct into her eyes, and she remained entranced and motionless until she was discovered (*Revue de l'Hypnotisme*, October, 1889). I have never heard of the hypnotic condition being thus involuntarily and spontaneously induced when the Nancy method has been employed.

† Perhaps here I may be allowed to say that my own experience in this matter is a very pleasant one. It has been my privilege to

that he approached the subject with only one end in view —the relief of disease. If the theories he had deduced from observed facts (for every man who is not a mere empiric must hold theories) did not, after closer observation, continue to correspond with them, the theories were thrown over, and not the facts, as too often happens. The Nancy school may therefore be called practical and therapeutic, in distinction from Charcot's, which is theoretical and experimental.

The following table, taken from Professor Beaunis's work, proves what a mistake it is to suppose that only hysterical persons are influenced by the treatment.

Patients submitted to hypnotization by Dr. Liébeault in 1880 (1,014):

Not influenced	27
Drowsiness	33
Light sleep	100
Heavy sleep	460
Very heavy sleep	232
Somnambulism (slight)	31
Ditto (advanced)	131
	1,014

Beaunis shows in the table on p. 63 the percentage of the different stages of hypnotism at different ages.

These statistics refer, of course, to Nancy, and, as has been already pointed out, that town is pervaded by an atmosphere of hypnotism and suggestion. But Dr. Van Eeden assures me that at Amsterdam he finds the pro-

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demonstrate the Nancy treatment to a large number of medical men, and not only have they been kind enough to express appreciation of what they have seen, but they have practically shown it by at once trying the methods in their own practices. Doctors are naturally only too pleased to adopt a new treatment which has been proved useful, and which will help them to deal with many troublesome cases; but it requires to be presented to them in a manner free from mysticism and exaggeration. The enthusiasm the good Dr. Liébeault showed was a part of his character, and lent a great charm to his advocacy of hypnotism; but discretion is the better part for his followers, and I think they fully realize this.

portion of the 'uninfluenced' but little larger, and the experience of Bérillon in Paris, Moll in Berlin, Wetterstrand in Stockholm, Bramwell, Betts Taplin, Creed, Kingsbury, Wingfield, Cruise, Wright, Woods, and other observers all over the world, is of a similar nature. The proportion of somnambulists, however, is undoubtedly much greater at Nancy than we could expect to find it in England. Among over 500 patients I found only about fifty.

	Somnambulism.	Very Heavy Sleep.	Heavy Sleep.	Light Sleep.	Drowsiness.	Uninfluenced.
To 7 years ..	26·5	4·3	13·0	52·1	4·3	—
7 to 14 ,, ..	55·3	7·0	23·0	13·8	—	—
14 ,, 21 ,, ..	25·2	5·7	44·8	5·7	8·0	10·3
21 ,, 28 ,, ..	13·2	5·1	36·0	18·3	17·3	9·1
28 ,, 35 ,, ..	22·6	5·9	34·5	17·8	13·0	5·9
35 ,, 42 ,, ..	10·5	11·7	35·2	28·2	5·8	8·2
42 ,, 49 ,, ..	21·6	4·7	29·2	22·6	9·4	12·2
49 ,, 56 ,, ..	7·3	14·7	35·2	27·9	10·2	4·4
56 ,, 63 ,, ..	7·3	8·6	37·6	18·8	13·0	14·4
63 and above ..	11·8	8·4	38·9	20·3	6·7	13·5

And here a word on the subject of somnambulism. Though Liébeault and his followers do not seek to enforce the somnambulic state, but find a state of gentle lethargy or drowsiness sufficient for ordinary curative purposes, he considers that it is well to induce in the patient the most advanced state of hypnosis to which he is susceptible; for the more complete the hypnosis, the less liable are the patient's morbid auto-suggestions to interfere with the curative processes. Natural somnambulism is nearly always associated with mental or bodily weakness, but the artificial variety is not dependent on defective health, mental or physical. Private soldiers and agricultural labourers are not generally considered neurotic, but they are 'good subjects' for hypnotism, and a large proportion—perhaps a fourth—will be found to become somnambulic.

Strong muscular and intelligent men and women are,

in my experience, the best subjects for hypnotism. This was what Dr. Hugh Wingfield found when he was assistant demonstrator of physiology at Cambridge. He experimented on a great number of undergraduates, and the majority of them proved extremely good subjects. A few years ago, during a visit to the University, I was asked to hypnotize a party of undergraduates in a friend's rooms. Ten out of twelve were easily influenced, two or three to the extent of somnambulism. Now, we know that these young men constitute the pick of the nation, intellectually and physically, and such experience proves the fallacy of the contention which one sometimes hears urged against hypnotism, that it is only applicable to fools and weaklings. In my practice I have found schoolmasters and schoolmistresses most satisfactory patients, and my experience is shared by other physicians. Their training assists mind-concentration, and the same may be said of Roman Catholic priests, many of whom I have treated.*

I understand that persons who make a public show of hypnotism always express a preference for muscular subjects. Probably strong, healthy people are more trustful and less fidgety than the weak and neurotic.

But I think the most interesting psychical results are likely to be achieved with neurotic subjects whose nervous systems are highly strung. I am not, however, at all sure on this point, seeing that some of the most interesting series of experiments in advanced hypnotism, including thought transference and second personality, have been made by Professor Janet at Havre with a strong-framed fisherwoman as the subject; and the Brighton experiments of the Society for Psychical Research were made on a young healthy tradesman.

* There is an idea still prevalent in certain quarters that the Catholic Church forbids the practice of hypnotism. Such is not the case. Sir Francis Cruise was a devout son of the Church, and many priests have been sent to me for treatment by high ecclesiastics. The Church very wisely insists that the treatment shall only be carried out by medical men and by permission of the authorities.

Somnambulism is not an essential product of hypnotism, and, interesting though its phenomena may be from a pathological and psychological point of view, they are no more a part of suggestive treatment than an exhibition of the poisonous effects of drugs is a part of ordinary medical practice. They help to elucidate points in the treatment, and therefore must be studied, but experimentation upon them is outside the scope of the physician, as such.*

* See Appendix. While hypnotism was a new thing in England, the knowledge of it seemed to be chiefly confined to theory, and one had to hear many fanciful and exaggerated statements. For instance, in an article on the subject in the *Saturday Review* of December 8, 1888, *à propos* of a paper of mine in the *Nineteenth Century* for December, the writer, evidently a medical man, states that a person once hypnotized is at the mercy of the operator, who can repeat the operation at will, even without the consent of the patient. Further, that anyone can easily hypnotize a person who has once submitted to hypnotism; and again, that a person once hypnotized is unable to look people in the face without feeling an irresistible desire to sleep. I have made inquiries among my patients of both sexes, some of whom have been hypnotized many times, and have fallen into the profounder degrees of sleep. They can all certainly look me in the face for any length of time without feeling in the least degree sleepy; and they all tell me that until they entirely give up their minds to the operation no soporific effect is produced. Most misleading conclusions have been drawn from exceptional cases, such as that of the 'Soho sleeper.' These belong in no sense to hypnotism as a therapeutic system, but are examples of hysteria. Constantly hypnotizing a weak-minded person for experimental purposes will probably bring about a morbid state of brain, and such abuse of a therapeutic agent can only be deprecated and discouraged. Du Maurier's clever novel, 'Trilby,' is responsible for a good deal of popular misunderstanding. Of course, the novelist has drawn quite a fancy picture, and the hypnotism of fiction altogether is very much a stage product.

CHAPTER V

Psycho-Therapeutics not an Exclusive System of Treatment.—Some Diseases found to benefit from it.—Organic Processes affected by Hypnotic Suggestion.—Blisters and *Stigmata* so caused.—Treatment especially useful in Neurotic Diseases.—Hysteria, Hypochondriasis, Dipsomania, and the Opium Habit.—Moral Depravity.—Double Consciousness.—Permanence of Cures.—Hypnotism distinct from Magnetism.—Possible Abuse of Hypnotism not a Bar to its Use in Medical Treatment.—Restrictions and Precautions necessary.

WE are now in a position to speak of suggestion as a mode of treatment and cure, and we will first consider to what class of diseases it has hitherto proved applicable. And here I may say that, although Liébeault rarely gave medicines, but obtained most of his remarkable results by the suggestive treatment pure and simple, his followers by no means dispense with those remedies which the researches of generations of able men have put within their reach. In suitable cases they make use of dietetics, drugs, electricity, and massage, and the combination of those means with suggestion often gives better results than any one method of treatment.

Hypnotic suggestion is especially applicable to chronic complaints. Rheumatic and gouty pains often yield to it, as do also many diseases of malnutrition, such as anæmia and neurasthenia. In derangement of the functions in women it acts very beneficially, both in checking excessive loss and in promoting a proper flow; also in relieving or curing sufferings of all kinds connected with the period. In chronic constipation and diarrhœa it has excellent effects, and patients usually find that the intestinal functions become regular through its use.

Indeed, therapeutic suggestion gives a healthy tone to the organic system generally, and tends to regulate all its functions. A consideration of the experiments of Bernheim, Delbœuf, and others will render this statement more comprehensible than it may appear on the surface. Dr. Forel, late Professor of Psychology at the University of Zurich, and Medical Superintendent of the Cantonal Lunatic Asylum, is very decided in his views about the treatment of chronic constipation by hypnotic suggestion, which he affirms is greatly to be preferred to the use of purgative and other drugs. He cites many remarkable cases to prove this, and shows how suggestion acts by restoring a natural function, whereas drugs pander to a weakened and diseased subconscious craving, and perpetuate it.

Suggestion is extremely useful in cramp from the overuse of certain muscles, such as is commonly found among writers and telegraph clerks. It is very successful also in some cases of old-standing paralysis, and especially so in the infantile variety. Many practitioners speak highly of its curative power in nervous affections of the eyes—*e.g.*, hysterical amaurosis—and it is found beneficial in a few forms of deafness. Numerous cures of Ménière's disease are on record. In fact, whenever we find chronic disease resisting the usual methods of treatment, suggestion may be thought of as a useful ally. It often supplies a fillip to arrested curative processes. Many practitioners all over the country now employ hypnotism when indicated in the ordinary routine of their practice, and find it an invaluable asset. I recently asked such a one (Dr. Bryden of Godalming) if he would rather dispense with aspirin (a very favourite remedy with him) or hypnotism. He replied that it was a hard question, but he felt he could find substitutes for aspirin, whereas hypnotism was unique; therefore he decided in favour of the latter.

Perhaps some readers will consider the scope here given to suggestion too wide, but I am convinced that its intelligent use by the medical attendant will be found

beneficial in many cases where drugs do not act satisfactorily, or to reinforce the action of drugs. For instance, it may be desirable to give ipecacuanha, but the retching following its administration may render its use impossible at an important time; or a mild cathartic may induce colic, often half imaginary; in such cases hypnotic suggestion may be useful to calm over-sensitiveness. In many diseases, such as typhoid and rheumatic fevers, the attendant weariness and restlessness are among the most distressing symptoms. These may often be relieved by this treatment, which is here advocated, not as a speciality, but as an auxiliary in practice to every medical man. Bernheim used it practically for every case in his wards, and finds it of immense value in calming nervous excitability, improving general nutrition, and producing refreshing sleep. Myers relates how Bernheim hypnotized a patient who was brought into his wards suffering from pneumonia, accompanied with delirium and sleeplessness. The man slept quietly for two hours, and awoke refreshed, fairly comfortable, and free from delirium. The physical signs of consolidation were the same after as they were before the sleep, but the attendant suffering was very greatly modified.

Sir Lauder Brunton tells how he saw Liébeault treat a case of bronchitis. He hypnotized the patient, and suggested, ' You will have no more pain, no more spit, no more cough, when you wake up.' Dr. Brunton adds, when the man woke up he had less pain, less cough, and less spit (*op. cit.*, p. 232).

When I was attending Liébault's clinique, the only patient he did not try hypnotism on was a boy suffering from scabies, and for him he prescribed the usual sulphur ointment.

The sick and those reduced in strength are exceptionally good subjects for hypnotic suggestion, and therefore offer a particularly favourable field for its employment. In many chronic cases it seems to give the patient a fresh start, and puts the system in a condition favourable to

the action of other remedies, such as massage. I am certain that it will, in many instances, be found a valuable adjunct to the Weir-Mitchell method, and will supply the mental and moral element which is sometimes required in this treatment. Some patients are irritated rather than soothed by massage, and for these hypnotism will act as a preparatory step. Several well-known physicians, speaking to me on the subject of hypnotic suggestion, have told me that they find *suggestion* sufficient in their practice, without *hypnotism*, and have given several instances in which pseudo-paralysis and hysterical troubles generally have yielded to their well-timed assurances.*

* Professor George Buchanan, of Glasgow (*Lancet*, June 20, 1885), records two cases treated by him by simple suggestion without hypnotism. The first patient, a lady who had been bed-ridden and unable to move for months, was supposed to be suffering from spinal disease. Dr. Buchanan had but just returned from a visit to Lourdes, where he had been much struck by the 'miraculous' cures of nervous complaints closely simulating organic disease. He formed the opinion that this was a case of hysterical pain and paralysis, and he assumed a confident manner, and told the patient to turn on her other side. She did so, and he gradually got her out of bed; and before he left the house she was able to walk about the room and was free from pain.

The cure (Dr. Buchanan adds) appears permanent, for she was quite well eight years afterwards. The other case he cites is one of 'hysterical knee,' which had been diagnosed and treated as disease of the joint. After a little manipulation, he told the patient that she could walk, and she was at once able to do so, though the slightest movement previously had caused intense pain. These cases are very similar to many reported by Bernheim and others as having been cured by hypnotism, and they are, as Dr. Buchanan says, among the most intractable complaints which medical men are called upon to treat, the disorder being in the imagination, and not in the part which appears affected.

The beneficial and curative action of suggestion is not confined to bodily ailments. We are all acquainted with numerous examples of cases where a 'word in season'—*i.e.*, a suggestion falling on a receptive soil—has so influenced moral conduct that it has changed the entire life of the individual. This point is strikingly brought out by Professor James in his fascinating book, 'The Varieties of Religious Experience.'

The eloquence of Father Mathew and Gough, the temperance advocates, produced many as wonderful conversions of drunkards as hypnotic suggestions can ever claim, and though a proportion of these were but temporary, others were both sudden and permanent. The history of all religious revivals abounds with instances of sinners being reached by suggestion under special circumstances of preparedness, who would never have been touched by ordinary preaching.

Dr. Mercier, in a paper on the treatment of agoraphobia (*Lancet*, October 13, 1906), recommends the use of imperative suggestion, but goes out of his way to say by this he does not imply hypnotic influence. I am at a loss to understand his objection to the most certain and scientific method of enforcing ' imperative suggestion.'

I maintain that if simple suggestion can work thus beneficially, its effects must be greatly increased by hypnotism, and that with this aid it will sometimes produce results which it would be impossible for it to achieve alone, even in the most able hands. It is, as I have said elsewhere, through unwonted concentration of the imaginative powers upon a given point that suggestion works, and for most persons intense concentration is difficult—indeed, almost impossible to attain to in their normal state. Sir James Crichton Browne, in his eloquent address before the British Association at Leeds in 1889, laid particular emphasis on the important rôle played by the imagination both in health and disease, and begged his audience to employ this power and direct it into proper curative channels. As Wesley said when he set hymns to lively music: ' Why should the devil have all the best tunes ?'

Liébeault strongly recommends the treatment for sprains and muscular strains. In such cases it may be combined with gentle massage of the injured part. In the acute stages it will relieve pain and quicken the natural processes of repair, and in chronic cases it seems to aid in absorption of any exudation or deposit which may have formed. The rapid relief of pain and restoration of movement in some of these cases must be seen to be believed.

In cases of ' railway spine ' and of disorders resulting from shock and concussion generally, it affords hope of relief and cure; and in such cases the patient should be allowed to remain in the hypnotic state for a considerable time, as the rest to the nervous system and freedom from pain and irritation are, no doubt, important factors in

the cure. There is no question of the value of suggestion in the treatment of such nervous conditions as insomnia and hysteria, and of such diseases as require above all things mental calming and repose. It is often impossible in many cases of chronic disease to say how much of the suffering depends upon organic disease, and how much on reflex disturbance and functional derangement. This is well seen in diseases of the heart, where the distress of the patient is often quite out of proportion to the amount of lesion. In such cases the neurotic symptoms may generally be relieved by hypnotic suggestion.*

The use of hypnotism as a means of diagnosis should not be overlooked. Hamilton Osgood (*loc. cit.*) was enabled by its employment to discover the functional character of a paralysis which had been previously looked upon as of organic nature. On the other hand, I have been able to pronounce symptoms considered hysterical and functional to be dependent on organic and structural degeneration—*e.g.*, spinal sclerosis—because they remained persistent even in profound hypnosis.

Its power over organic processes has been clearly shown by many experiments, made either on students of the system or on patients, with their own previous consent. A patient in the hypnotic sleep is told that he has burnt his hand or some other part of his body; he not only feels heat and pain in the place indicated, but it frequently happens that the spot becomes red and inflamed, exhibiting all the objective signs of congestion, and even of inflammation, vesication, etc. The suggestion of the operator has, through the patient's imagination, been

* On this point I would especially refer the reader to Dr. Buzzard's Presidential Address to the Neurological Society, 1891 (republished in book form). He clearly shows how fine are the differences between 'functional' and organic diseases of the nervous system. The so-called 'functional disease' of to-day may be shown to be organic to-morrow, as our method of investigation becomes more perfect—*e.g.*, the symptoms of locomotor ataxy used to be considered as purely functional as those of paralysis agitans are at present; and the fact that the movements of paralysis agitans are but little affected by hypnotism points, indeed, to there being a concealed organic basis.

able to affect the vasomotor functions of the sympathetic nervous system. This experiment and others of a like nature open up a wide field of pathological interest; for if suggestion can cause an increased flow of blood to a part, and local congestion and inflammation, it can also dissipate and cure these conditions when they occur in disease.

But function depends upon blood-supply in the first place, and it follows that by influencing the trophic and vasomotor centres we must affect and control not only psychical processes, but the motor sensory and structural arrangements which form their physical basis. This is practically the position we assume.

Delbœuf, desiring to ascertain the positive effect of hypnotic suggestion in the treatment of a burn, and being, of course, unable to find two persons of identical constitution and condition generally, used the ingenious device of producing with caustic two exactly similar burns on the same person—one on each arm—and of treating one wound by curative suggestion, combined with the usual remedies, and the other with the usual remedies only. Having induced hypnotic sleep, he suggested to the patient that the one arm should be cured painlessly and without any suppuration; and it did in fact heal, by simple separation of the slough and healthy granulation, ten days earlier than the other, which went through the suppurative process, accompanied by inflammation and pain (*op. cit.*, p. 9). Were this case not reported by a well-known *savant*, I confess I should feel some hesitation in recording it here; as it is, its accuracy is beyond doubt.*

Beaunis (*op. cit.*) notes a case in which, by suggestion, he regulated the pulse of a patient. Before sleep there were 96 pulsations in a minute, which during the sleep increased to 98·4. He suggested a reduction, and it fell to 92·4. The pulse having again risen to 100·2 he suggested an acceleration, and it further rose to 115·5. The slackening and quickening of the pulse in each instance

* See also Bérillon's wart case, *op. cit.*, p. 18.

followed immediately upon the suggestion. The tracings were taken by Marey's sphygmograph, and of these facsimile reproductions are given in Beaunis's work. He also succeeded in slightly raising the temperature of patients by suggesting an increase of warmth.

I have myself frequently succeeded in modifying the heart's action by hypnotic suggestion to a notable extent by as many as ten beats in either direction in the minute, but the subjects on whom vesication can be produced by suggestion are, I imagine, very few, and in them probably only after prolonged experimentation. I have on one occasion produced vomiting by suggestion. Once a dipsomaniac patient, who had relapsed and indulged in beer, required, I felt, very drastic treatment. He was a somnambulist, and in the trance state I told him that if he ever drank beer again it would act as an immediate emetic. I then awoke him and insisted on his drinking half a glass of ale. He had hardly swallowed it before it returned, though he was quite unconscious of the suggestion.*

Beaunis describes at some length the production of all the effects of a blister following the suggestion that one had been applied. ' M. Focachon, a chemist of Charmes, showed us (Drs. Bernheim, Beaunis, and Liébeault) this phenomenon on a patient whom he brought to Nancy. During her sleep, at about 11 a.m., eight postage stamps were applied to her left shoulder, while it was suggested to her that they were a blister. She was allowed to sleep all day, being, however, aroused for meals, and was kept under observation. When she retired for the night she was told to sleep until 7 the next morning. At 8.15 a.m. the dressing which had been put on was removed, and

* I have since received letters from this gentleman's friends, and what they say affords remarkable evidence of the deep-seated effect of hypnotic suggestion. He was taken suddenly ill at a cricket-match with what turned out to be acute pleurisy. As he was faint and in pain, he was given the usual rough-and-ready remedy—a glass of spirits. No sooner had he swallowed it than it returned. It was three months since I had last hypnotized him, but Dr. S—— had repeated my suggestions.

the stamps were found *in situ*. The surrounding skin, for 4 or 5 centimetres, was thickened, modified, and of yellowish-white colour. The cuticle, however, was not raised, and did not form a blister; but it was thickened and wrinkled, and presented the appearance usual before complete vesication. The part of the skin was surrounded by a zone of intense redness and swelling.* M. Focachon and the patient returned to Charmes, and by 4 p.m. four or five vesicles were developed. Fifteen days later the blister was still suppurating freely. M. Focachon made a similar experiment on another patient, and in forty-eight hours produced a blister, which followed the same course.' Dr. Wetterstrand has kindly sent me photographs of a woman's hand, on which he raised blisters by simply touching places with the tip of his finger and suggesting it was a hot iron. The converse experiment has also proved successful. A blister is applied to a hypnotized subject, who is told that it is a soothing liniment, and no vesication is produced (Alfred Fouillée, *Rev. des Deux Mondes*, May, 1891).

Professors Bourru and Burot, of Rochefort, succeeded in causing hæmorrhage from the nose, by suggesting that it should take place, in a young soldier of epileptic and hysterical constitution; they even fixed the hour when it should come on. On the same subject Dr. Mabille, of the lunatic asylum at Lafond, produced instantaneously, by suggestion, hæmorrhage from different parts of the body, exactly similar in character to the *stigmata* of some medieval saints.†

* Sir B. W. Richardson, in his kindly notice of my book in the *Asclepiad*, June, 1890, attributes the blisters produced in this case, not to suggestion, but to the fact that the gum on the postage stamps was of bad and irritating quality! Dr. Albert Bonjean ('L'Hypnotisme, ses Rapports, avec le Droit et la Thérapeutique,' Paris, 1890) relates numerous experiments in which he was able to obtain stigmata and blisters by suggestion alone, without even touching the part affected.

† The best modern example of a religious *stigmatisée* is that of the Belgian nun, Louise Lateau. The case was very fully investigated in 1869 by Dr. Lefébvre, Professor at Louvain University, and other physicians, who came to the conclusion that the phenomenon was a genuine result of auto-suggestion (Bonjean, *op. cit.*, p. 106).

Professor Krafft-Ebing, in his remarkable monograph on the case of Ilma Szandor, a young Hungarian girl of extremely hysterical type, gives an account of many experiments he performed on her. He was able by simple suggestion to produce blisters and hæmorrhages and to effect marked alteration in temperature and in the character of the pulse and respiration.

The temperature experiments of Krafft-Ebing with Ilma Szandor seem to have been confined to causing decrease of temperature—no doubt as affording the most striking evidence of the power of suggestion. At a meeting of the Medical Union of Vienna in December, 1887, he hypnotized her by friction of the forehead, and suggested that her temperature should fall to 35·5° C. Immediately before the operation the temperature was 37° C., and immediately after it (at 8 p.m.) it was 37·1° C. At 9.30 p.m. it was 36° C. Next morning at 8 a.m. it registered 35·9° C., and at noon it was 35·7° C. It remained at this subnormal height until her next hystero-epileptic attack. The experiment was repeated on several occasions, and the fact was demonstrated that not only could the temperature be lowered by hypnotic suggestion, but that its height at a fixed hour could be arranged by suggestion. Truly an extraordinary phenomenon. Professor Preyer, commenting on it in his admirable work, says he can see no way to account for the extraordinary changes of temperature except by admitting that intense ideo-conception processes in the cortex can under certain conditions act upon certain heat centres. He is disposed to doubt the continuance of the action, and supposes that the application of the thermometer revived the suggestion each time it was used, and that the effect being produced and the instrument withdrawn, the temperature would rise to its normal level, and would continue at it until a repetition of the operation led to a repetition of the suggestion and its realization (*op. cit.*, p. 73). It must be remembered that Ilma Szandor was altogether an exceptional subject, and that Beaunis experimented over a considerable period of

time without being able in any case to obtain more than a fractional rise. The fact, however, that an agent only produces its most extreme effects in persons of rare idiosyncrasy does not take from the importance of its action, and enables us to understand the slighter effects produced on ordinary mortals.

In Binet and Féré's ' Animal Magnetism ' (Kegan Paul, Trench and Co., London, 1887) the above and several other similar experiments are related; for instance, how Dumontpallier succeeded in raising the local temperature several degrees, and how Bourru and Burot wrote his name with the blunt end of a probe on both arms of a hysterical male patient, suggesting to him, ' This afternoon, at four o'clock, you will go to sleep, and blood will then exude from your arms in the lines which have been traced.' The patient fell asleep at the appointed hour, and the letters appeared on his left arm, marked in relief, and of a bright red colour, with here and there minute drops of blood. But no such sign appeared on the right arm, which was paralyzed.

Charcot (the writers go on to say) and his pupils at the Salpêtrière have often, by means of suggestion, produced the effects of burns upon the skin of hypnotized patients (*op. cit.*, pp. 98, 199). Féré adds that he has demonstrated that any part of the body of a hysterical patient may be made to change in volume by simple directed attention, thus showing what influence may be exerted by a simple phenomenon of ideation on the vasomotor centres.

Binet and Féré cannot be accused of undue credulity. They refuse to accept as proof any phenomenon which has not been subjected to the most searching scientific tests; and they are so imbued with the theories of Professor Charcot, that they fail to see the therapeutic applicability of hypnotic suggestion, except in hysterical cases.*

* Dr. Gilbert Scott was kind enough last year to bring to see me one of his patients who had allowed him to make experiments upon her in deep somnambulism. She was a lady of good position

I have made a few experiments to test the length of time during which a suggestion of sensory illusion continues to act, and I have generally found that a night's sleep puts an end to it. But this is not always the case, and Mrs. S—— has on several occasions remained under the suggested delusion for several days. For instance, I once hypnotized her and told her that her favourite cat, a tabby, had a black tail, and that it would continue so for three days. On awaking, she no sooner saw the animal than she described the change which she noticed had come over it, and she expressed a fear that it was ill; when at the end of three days it assumed its natural colour to her eyes, she expressed her relief at seeing it recovered. A gentleman, to whom I have sometimes suggested visual hallucinations, sticks to the assertion that a colour is what I have told him, but he does so in a somewhat shamefaced manner, as one conscious that there is something not right about it. So one gets all grades of effect, from complete sensory hallucination to merely increased credulity.

The effects of suggestion are not necessarily temporary and immediate, but may be caused to appear hours, days, and in some cases months, after the suggestion has been given. Bernheim cites several instances of this prolonged or deferred action, applied to the physical or psychical side. Under the physical heading I should place the

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intelligence, and education, married to a professional man, and thirty-three years of age. She had been Dr. Scott's patient for some months, suffering from obstinate headache and menstrual troubles. Other treatment having failed to give much relief, he tried what hypnotism would do, and the results exceeded his most sanguine expectations. The patient, Mrs. T——, was an even better hypnotic subject than my Mrs. H—— referred to on p. 146, and she took a great interest in the experiments. Not only did she carry out such subconscious estimation of time as described on p. 79, but she developed very well marked stigmata on her forearm, corresponding to the touch and suggestions of Dr. Scott. These took the form of numerous punctate spots—petechiæ—arranged in the form of a cross and triangle, and were evidently due to small extravasations of blood under the skin. Such phenomena are, of course, quite different to the *taches cérébrales* often obtainable in hysterical patients without hypnotism.

production of such an objective symptom as a blister or ecchymosis, and under the psychical a sensory impression, such as the appearance of a hallucination at a given hour, or the performance of a suggested action after a certain interval. For instance, a soldier, a patient of Liébeault, while in a state of hypnotic somnambulism was told that on a certain day in two months' time, at ten o'clock a.m., he would come to Liébeault's consulting-room, and would there see the President of the Republic, to whom he would make a profound obeisance. The President would then advance towards him, would address him in complimentary language, and confer upon him a decoration, which he himself would fasten to the recipient's buttonhole. On the day appointed a considerable audience, consisting both of doctors and patients, was assembled in the consulting-room, and at ten o'clock precisely the soldier appeared. As he entered his expression changed; he regarded the bookcase, and bowed low in its direction. He then advanced, bowed to Dr. Liébeault, and stood at attention, with a gratified smile on his face, and looking downward at his buttonhole. In a few moments he made another profound obeisance, muttered some words and walked away, much to the astonishment of those present, who were ignorant of the meaning of this pantomime.*

Beaunis tells a similar story of a young woman whom, while she was in a profound hypnotic state, he assured that on the following New Year's Day she would see him enter her room, and would hear him say, 'Bon jour, mademoiselle.' This suggestion was made in July, and on the following 1st of January the young woman wrote to the doctor, saying that she could not understand how it was that he had entered her room that morning, had greeted her, and then walked out immediately. She remarked further that he was dressed in the same clothes she had seen him wear in the month of July. At that time Dr. Beaunis happened to be in Paris, while the young woman was at Nancy.

* Quoted by Binet and Féré, *op. cit.*, p. 245.

Bramwell has made some interesting experiments on the estimation of time by somnambulists (*Brain*, 1898). His subject, a young woman, is told in the hypnotic state that after a given number of hours or minutes she is to perform a certain act. For example, she is to address an envelope to Dr. Bramwell at the expiration of 12,500 minutes from the moment she wakes up. When awakened she remembers nothing of the sitting, and goes about her usual work, but at the appointed time she executes the order, though perhaps it may be in the middle of the night, and she has to wake up for it, or she may be engaged in some absorbing work.* It is a very interesting question what causes this response to time suggestions. It may be that the ' subconscious self ' has a means of reckoning the moments as they fly. Perhaps the ratio of expiration is unconsciously noticed, and gives a clue to the passage of time. The conditions of modern life tend to suppress many faculties which exist in primitive man. The Australian savage can find his way through the pathless bush by an instinct which has been lost by the white man. There is a story of an imbecile youth who could always tell the time within a few seconds : I suppose he had the ' time sense ' unusually developed, and, having nothing else to do, cultivated it as a speciality.

Deferred suggestions, like nearly all suggestions given in the advanced stage of hypnotism, are almost invariably followed by amnesia. The subject, when awakened, has no recollection whatever of the order received by him, nor will it recur to his consciousness until the moment for performance has arrived. If he is then questioned as to his motives for such an action, he will probably reply that he did it upon an unaccountable impulse which he could not withstand. In very rare cases indeed there exists for some time beforehand an impression that at a certain hour a specified act must be done, or a specified word spoken. Occasionally, too, the hypnotic subject may

* Dr. T. W. Mitchell has given particulars of a similar case in Transactions of the Psycho-Medical Society.

recognize the impulse as having been dictated to him by a past suggestion; but generally, as I have said, it will be regarded as quite spontaneous, and not to be accounted for.

Moll, in discussing this point, aptly compares the mental state of a subject to whom the execution of a past hypnotic suggestion at a certain time has been commanded to that of a person who has been given a letter to post, and who puts it in his pocket and forgets it until he is reminded of his duty by passing a post-office. He then automatically posts the letter, but very likely entirely forgets the action, and may be unable to recall it.

This illustrates the fact, which cannot be too cogently impressed on the reader, that hypnotism does not induce a new condition, nor work on perfectly novel lines to the extent which is often supposed, but that its effects have analogies in nearly all the waking conditions of life, and that it acts by intensifying and utilizing mental states which are abnormal in degree, but not unnatural in kind.

Such phenomena throw a strong light on many stories of supernatural apparitions, and show how useful hypnotism may prove in the hands of competent observers as a key to psychical problems. Here we find an idea impressed on the ' unconscious mind,' and lying dormant for months, brought into action by the simple efflux of time, as certainly as a piece of clockwork can be set to run down at a fixed hour. I need hardly add that such experiments as the foregoing are successful only in a very small proportion of cases, and probably only in ' educated ' subjects.

Fulfilment of a suggestion, the prompting of which has either not been consciously heard, or has been instantly forgotten, is not without its analogy in ordinary life. We must all acknowledge that we occasionally think, speak, and act in what seems a motiveless manner, and yet, by careful introspection or tracing back, we shall probably find that our thought, word, or action has its source in some forgotten or apparently unnoticed incident, which

has left its impression upon our brain cells. The brain cells, once stimulated, may under certain conditions, as in delirium, prompt the utterance of sounds apparently forgotten or unrecorded. Thus, we find persons on their death-bed, or in fever, speaking a language which they had forgotten since childhood; like an elderly Scotch physician, a friend of mine, who for an hour before his death talked only in Gaelic, the language of his childhood, which he had not spoken for fifty years.* There is a well-known story of a servant-girl, who, in the delirium of fever, continually repeated passages from the Greek Testament, which her ears had unconsciously taken in years before, when she had been in the service of a clergyman. And all persons entrusted with the care of lunatics must know what unseemly and even vile expressions may, in the paroxysms of insanity, be uttered by young, refined and virtuous women, whose lives have been carefully guarded from evil influences. The vicious word or phrase heard by them long ago, perhaps in early childhood, while

* Some persons are, as Bernheim points out, 'suggestible' to an extraordinary degree, independently of hypnotism. This, he finds, is especially marked in children and in persons affected with phthisis. He relates how he has frequently suggested imaginary actions, and even crimes, to such subjects, with the result that the ideas have been accepted as true, and have become as actual truths to them. This increase in the normal suggestibility may perhaps serve to explain the extravagant stories invented by some children. Such untruthfulness may not depend upon viciousness, but on excessive imagination, which has been set in action by some outside suggestion. Professor Dejerine, speaking of suggestibility without hypnosis, cites the case of two young countrymen under his treatment in the hospital. They were both fresh from military service when he first saw them, and neither of them had ever been hypnotized; yet he was at once able by simple suggestion to evoke in them sensory hallucinations, changes of personality, and all the other psychical phenomena which one is accustomed to associate with the most advanced stages of hypnosis (*Revue de l'Hypnotisme*, January, 1891).

Anæsthesia by suggestion may be sometimes induced quite independently of hypnotism. For instance, Dr. Robinson, of the Mile End Infirmary, found that he could induce complete anæsthesia and analgesia in a hystero-epileptic girl, who had never been hypnotized, by telling her she was to feel nothing. The girl had confidence in the physician, and his suggestion was in some way able to produce a condition resembling hysterical anæsthesia, probably by inhibition of the sensory centres.

passing along a street, or standing at a window, though uncomprehended at the time, and apparently unremembered, was nevertheless recorded in the brain cells.*

It will thus be seen that suggestion is an exceedingly powerful agent—effective in the hands of the experimentalist, and efficacious also in those of the physician.

Most of the Continental practitioners of the system use it chiefly at consultations in their own rooms, where, of course, sufferers from acute diseases are not likely to present themselves. It is frequently used in childbirth with beneficial result, and in surgery it is often employed. No doubt most susceptible persons might be painlessly operated upon while under its influence, but, as a rule, the natural agitation of a patient before an operation would so distract his attention as to render hypnotism impossible at the moment. A course of training would be necessary, involving much time and trouble; whereas chloroform and other anæsthetics are easily administered, and are commonly certain in their effect. Bernheim uses suggestion in conjunction with chloroform, and finds that his patients take the anæsthetic better, and require a much smaller quantity, than when it is administered silently in the usual way. This is the experience of many anæsthetists, and the question was discussed in a debate (1910) at the

* A case reported by the Society for Psychical Research shows the extreme importance of very early impressions which may not have been registered in ordinary memory, and yet cause after-effects. A lady of early middle age was invariably haunted by a certain nightmare. This always took the form of being attacked and bitten by a great white dog.

The underlying cause of this dream was afterwards explained by an old nurse, who related that she had charge of the lady when an infant of about a year old, and left her asleep in a cradle in a room opening on to a garden. One day a strange white dog had dashed into the room, upset the cradle, and awakened the sleeping infant. No great harm had been done, but the impression made on the undeveloped cortical cells had never been eradicated. Suggestion, if the patient were a good hypnotic subject, would almost certainly remove the idea. The researches of Freud throw much light on these cases, and show how careful we must be to guard children from evil influences. Not only 'every word a man shall utter,' but every word a child shall hear, seems stored up in the brain, and may come up for judgment.

Royal Society of Medicine, in the section of Anæsthetists. Much of the success of certain operators was attributed to their gentle and tactful administration. I know of no more promising field for hypnotism than its use after operations—to relieve pain, neutralize shock, induce sleep, and remove listlessness and malaise. I have had but limited experience in this field, but such as it is it has been most encouraging.

Some years ago I hypnotized a woman for a dentist instead of giving her gas, and a very bad tooth was painlessly extracted. The patient not only felt no pain at the time, but there was no discomfort afterwards. This dentist tells me that he now often uses hypnotism as an anæsthetic in his practice, and finds it extremely useful, as not only does the patient feel no pain, but he is able to assist the operator by holding his mouth open without a gag, and spitting when told to. If he finds the patient is not hypnotizable, no harm is done, and he gives gas in the usual way.

Suggestion may be usefully employed instead of narcotics in temporarily relieving acute pain, by inducing sleep which will not be followed by the deleterious consequences of drugs. It is also used in cases where the sleep itself is remedial, as in threatening congestion of the brain, delirium tremens, and in insomnia, when this exists as an independent condition, and not merely as a symptom of disease.

But it is in the so-called ' neuroses ' that suggestion obtains its most brilliant successes—in functional epilepsy, St. Vitus's dance, asthma, palpitation, nervous headache, spinal irritation, neurasthenia, ovarian pain, and the many forms of dyspepsia. Nervous disease is, unfortunately, ever on the increase, and the study of its symptoms, its cure and prevention, must increase to keep pace with it. As civilization advances, humanity develops ' nerves,' which in this sense may be said to have no existence in the savage and barbarous states. The vices and virtues of civilization tend alike to increase our sensitiveness.

Drink, narcotics, the abuse of tobacco, social excitements, intellectual culture, the ever-spreading desire to be or do something remarkable—these and many other stimulating influences are perpetually at work to promote nerve disease among us. In large cities, especially, where men live under artificial conditions and at high pressure, we find in all classes of the community affections presenting subjective symptoms quite out of proportion to the objective signs. It would be interesting to ascertain what proportion neurotic affections bear to organic diseases in a busy doctor's day's work. Probably one-half at least. Many of us when fresh from the hospital are vexed and surprised to find how much of our practice is made up of such cases. They are really among the most painful and difficult complaints a physician is called upon to treat, for they generally indicate a weak and depressed state of vitality, in which the slightest suffering is felt with intensified force. Take the medical nomenclature ending in *algia :* cardialgia, cephalalgia, gastralgia, myalgia, neuralgia—what visions of suffering do these words call up ! Most of it is curable, or at least relievable, by suggestion.*

Hysteria, and many other neuroses, are popularly supposed to be essentially the diseases of the rich and idle, but Savill has shown that a considerable proportion of the cases in workhouse infirmaries are of this nature.† This is what the physiologist would expect. Probably nothing is so fruitful a predisposing cause of neurotic ail-

* Pain, of course, is a variable quantity, and its appreciation depends upon the nervous temperament of the individual. There is, so far as I know, no ' algometer ' yet invented, though I have heard of a physician who told a suffering patient to hold her tongue, as he knew better than she the pains afflicting her. I once expressed great sympathy with Lady A—— because of the intolerable anguish she said an aching tooth was giving her. Her daughter was not much moved, and told me she had always discounted her mother's complaints since she had witnessed the effect following the sting of a gnat. Suggestion in the hypnotic state not only relieves or cures pain, but often helps the sufferer to bear that and the other ills of life with more patience and philosophy.

† ' Lectures on Neurasthenia,' 3rd edition, p. 19.

ments as intemperance in the parents, and the children of slum-dwellers are sent into the world with such unstable nervous systems that those who manage to survive infancy are the special prey of all varieties of neuroses, and become the permanent tenants of workhouses and infirmaries. I have not been much impressed by the results of hypnotic treatment in a large proportion of these cases, and I have attributed its failure to the fact that there is a total absence of material to work upon. There is no reserve of nerve energy, as Dr. MacFarlane says of some cases of neurasthenia.

There is one class of cases for which hypnotic treatment offers particularly good prospects of relief. The exhausted brain-worker, whose nervous system is in a painful state of erethism, will here find exactly the remedy which is physiologically indicated. He is suffering from functional derangement of the highest centres, and the action of hypnotism on those is their reduction to a condition of physiological rest. The overwrought and overanxious victim of modern economical and social conditions can be soothed and refreshed, by hypnotic suggestion, to an extent quite unattainable through drugs or physical treatment of any kind. But hypnotization of these subjects is a process requiring much tact and patience, for the condition of the brain is such as to render the necessary mental quiet and confidence difficult of attainment. Perseverance will, however, generally be rewarded by success, and success here often means new life to the sufferer.

I attended a case of this kind in 1899. The patient, a professional man aged thirty-seven, had separated from his wife from incompatibility of temper, and had lost nearly all his money. He got attacks of rage almost amounting to mania on the least contradiction or provocation, and at other times was intensely depressed, and often suicidal. It did not seem a very hopeful case, as suggestion could not bring back his money, nor render him and his wife suitable partners. But I tried it, and it

succeeded in making him take a philosophical view of the situation. He now leads a rational life, works hard, and succeeds in forgetting his troubles. There is no doubt but that hypnotism has saved this gentleman from madness or suicide.

A somewhat similar case came under treatment about the same time. This patient is an accountant who had broken down from overwork and business worry. He had been a good deal to blame, and was tortured by exaggerated remorse. He had been sent a voyage round the world, but *Cœlum, non animum, mutant, qui trans mare currunt*, and he returned no better. Resumption of work was followed by a very bad nervous breakdown, and he was induced to try hypnotism. Though but slightly susceptible, suggestion soon told upon him. He has lost his morbid fancies, regained his power of work, and has been actively engaged in his business ever since. Loss of sleep is the first symptom of breakdown in these cases, and it is one of the first to be corrected by suggestion.

'When one of these hypochondriacs,' writes Binet and Féré, 'whom we are apt to call *malades imaginaires*, comes to seek the help of medicine, complaining of subjective pains and uneasiness, what do we often reply? "It is nothing; it is merely fancy; try not to think about it"; and he is sent away with some anodyne or simple remedy. This invalid, who has suggested to himself his disease, and who really suffers from it, becomes convinced that it is not understood, and that nothing can be done for him.* The more he trusts his physician, the deeper is this conviction; and he who came with merely a trifling complaint may go away with one which is practically incurable.'†

* Dr. Savill, in his 'Lectures on Neurasthenia' (1906), devotes a most instructive chapter to differentiating hypochondriasis, hysteria, and neurasthenia. He considers the first as generally incurable, and the last as generally curable if properly treated, and hysteria as semi-curable.

† Physicians practising hypnotism see a great many of these cases, and they are most difficult to cure, for every failure on the part of a previous doctor acts as a strong counter-suggestion to success. The hospital physician who recently told a young friend

This is an appropriate place for once more urging medical men to try hypnotism and suggestion in the early stages of disease, and not to wait until the patient's bodily strength and mental receptivity have been exhausted by experiments in other fields of therapeutics.

The disease induced by morbid auto-suggestion may be controlled and cured by healthy suggestion from without, given when the brain is in a state peculiarly receptive of outer influence. The mind of a nervous, hysterical, hypochondriacal person is usually shut against all outward influence, except such as corresponds with and feels its morbid state. The patient when awake rejects cheerful and hopeful suggestions almost as if they were insults, but in the hypnotic sleep, his morbid self-influence being temporarily in abeyance, his mind will admit and act upon suggestions of bodily and consequent mental cure.

Dr. Russell Sturges, of Boston, U.S.A., has reported an interesting series of cases which he has treated by hypnotic suggestion, and a somewhat singular part of his work is that he has gained success without putting his patient into the deeper stages of hypnosis. On the contrary, he contends that deep hypnosis is unnecessary, and sometimes even harmful. Dubois is very insistent on this point, and his book* deals with the subject in an admirable manner. He says he cures by appealing to the patient's reason. But surely that has been done already *ad nauseam* by everyone in the entourage, and something more is looked for from the physician. Moreover, most of these professional invalids have ceased to be reasonable. Dubois may succeed in many cases owing to his strong personality, but most doctors need all the help they can get. 'Chinese' Gordon went through his wars armed only with a walking cane, but

of mine before the patient that he might try hypnotism if he liked, but that he was sure an operation would be necessary, seriously handicapped the treatment, for such a statement coming from one in authority tended to fix the morbid idea and its attendant symptoms.

* 'The Psychic Treatment of Disease,' English translation, 1910

ordinary soldiers find it necessary to carry swords and firearms. When I am asked if I can remove a morbid idea, I reply that it depends upon the patient's susceptibility to hypnotism. But, as Professor Pitres of Bordeaux points out, some people are more suggestible when awake than others when profoundly hypnotized.

Dr. Sturges, for instance, cites the case of a young lady who was a chronic invalid, and suffered greatly from internal neuralgia. There appeared to be no objective disease, but inquiry revealed that her ill-health dated from a mental shock she had sustained by an accident to her brother, brought on, she thought, through her fault. It appears she had urged her brother to ride a restive horse in spite of his protests. The horse threw him, and he broke his arm. Though he recovered, and was none the worse for the accident, anxiety and remorse so preyed on her mind that she became an invalid.

Sturges induced a slight state of hypnosis, and suggested to her the correction of the morbid idea. The girl's friends had frequently argued the subject with her without effect, but three or four treatments by hypnotic suggestion brought about a right frame of mind and a corresponding cure of the bodily troubles.

Another case is that of a lady who quarrelled with her father immediately before his sudden death. She accused herself of being accessory to it, and fell into a state of chronic melancholia. Dr. Sturges succeeded in getting rid of the exaggerated idea, and restoring her to happiness and health.*

Professor Gibert of Havre reports an even more striking case of a young woman who was brought into the hospital suffering from paraplegia and profound disturbance of the digestive and generative functions. She had been hypnotized, and was a good subject, but the result had been disappointing. Investigation into the history of the case showed that the girl had sustained three great shocks

* 'The Use of Hypnotism to the First Degree as a Means of modifying or completely eliminating a Fixed Idea,' Boston, 1894.

in her life: the first when, at the age of seven, she had been forced to occupy the same bed as a child with a bad skin disease; the second just at the age of puberty, when she was put into an icy cold bath; and the third when she was terrified by seeing a woman killed by falling from a window. It was after the third shock that the paralysis developed, but it found her weakly and hysterical. Dr. Gibert threw her into a state of profound somnambulism, and then gradually worked at removing the domination of the morbid ideas. He gave a less serious turn to the events which had so influenced her life, and got her to look back upon them without terror. The result was complete cure in a few sittings.*

One of my early hypnotic cases was that of a lady who had nursed a relative in his last illness. It was a very trying time for her, as he allowed no one else to attend him. One of her duties was to play to him, and in this he took great delight. Shortly before his death, in a paroxysm of jealousy he made her promise that she would never touch the piano after his death, assuring her that if she broke her word he would appear to punish her.

The peculiarly distressing circumstances produced an attack of nervous prostration, and when this passed away it left her with spasmodic asthma, which was new to her, choreiform movements of the head, night terrors, and intense nervousness, so that she was unable to travel or to face crowds. But the thing which most distressed her was her inability to listen to music, which had been the passion of her life, and she could hardly look at a piano without a nervous paroxysm.

I hypnotized her, and she passed readily into a condition of profound somnambulism. Then I suggested the disappearance of the morbid ideas, and with them of the nervous symptoms. Gradually the suggestions worked, and finally I got her with much difficulty to play on the

* Again one has to refer to Freud and his psycho-analytic treatment, which is foreshadowed in the above cases. Surely they, and a host of others, disprove his assertion that there is nearly always a sexual origin of phobias.

piano while hypnotized. She left me cured of her asthma and spasmodic movements, and with her nervous system so strengthened that she could ride and drive again and go into society. She was able to listen to music, but showed a great disinclination to play herself. A little more treatment would probably have completely cured all the symptoms, but she had to go abroad, and I lost sight of her.

In these cases correct diagnosis and judicious treatment are the essentials of success. One has to unravel, as it were, a tangled skein, and rough treatment would probably aggravate the trouble. One knows that diseased conditions caused by shock are sometimes cured by another shock; but the gentler method of induced hypnosis and applied suggestion is at once more pleasant and more likely to succeed. I think it will be found that a much larger amount of chronic illness is due to shock than is generally recognized, and I know of no higher duty of the physician than the curing of such cases. The study of hypnotism and the curious features it brings to one's notice often gives a new interest to ordinary practice, and throws a new light on the causation of an illness.

Dr. Constance Long has reported a case of most aggravated nostalgia cured very quickly by hypnotic suggestion. The patient was a young woman who was always most miserable when away from home. Dr. Ivo Cobb has found the treatment efficacious in the case of a lady whose long-continued grief after the death of her husband had become pathological. I have recently cured a major in the army of morbid jealousy of his wife. He knew his feelings to be quite unjustified, but could not restrain them or the unkind actions to which they led. His views about women were, in fact, those of a Mussulman, and their exhibition in England led to endless embarrassment and unhappiness. A few treatments by suggestion in light hypnosis completely changed his outlook on the subject, and brought about his conformity to his environment.

It is to be noted that in these three cases the trouble was an exaggeration of natural feelings, and the patient recognized it as such, and wished to be cured. Hypnotism supplied just the necessary mental leverage.

A recent case presents many points of interest. The patient was a weaver from the North, and he was sent to me by his clergyman. The poor man was unable to do his work, and suffered from sleeplessness, restlessness, mental depression, want of appetite, and other symptoms of neurasthenia. His illness dated from a year previous, when his son had nearly died from rheumatic fever. Quite unjustly he accused himself of being the cause of the illness, and nothing seemed to be able to get this haunting idea out of his mind. He proved a good hypnotic subject, and I sent him back in a fortnight quite well. I have treated successfully several cases of ' stage fright ' occurring in actors and musicians. This condition is largely the outcome of morbid self-consciousness and self-suggestion, and is, therefore, more appropriately combated by healthy suggestion. A notable cure is that of a talented violinist, whose nerve was completely destroyed by the adverse criticism of a prejudiced journal. She soon quite regained confidence, and remains cured.

The suggestive system has been extensively taken up by foreign lunacy and mental physicians. Among these are Drs. Sémal, of the asylum at Mons; Mabille, chief physician of the asylum at Lafond; Burckhardt, of the asylum at Préfargier (Switzerland). These specialists and others frequently report cases of amelioration and cure, through the use of suggestion, in the *Revue de l'Hypnotisme.*

The insane are not easily influenced by hypnotism; all who have anything to do with them know how difficult it is to get them to fix their attention on anything except their delusion; but once an influence is gained over them, suggestion may prove most useful.

Dr. Woods, late Superintendent of Hoxton House Asylum, London, is the chief worker in this field in

England, and in an important paper contributed to the *Journal of Mental Science** he describes several cases of melancholia, delusional insanity, and acute mania which he has benefited by hypnotic treatment.

That borderland of insanity occupied by dipsomania, the opium habit, and the excessive abuse of tobacco and other narcotics, offers an extensive field of usefulness to suggestive treatment. Professor Forel, in his address at the Congress of Neurologists held at Zurich in 1888, gave it as his opinion that in those cases suggestion is a very beneficial, and often a very powerful, agent, frequently enabling the drunkard to take that first step, which is always so difficult, towards reformation and cure. He cited also several cases in which he had succeeded by its means in curing patients of the opium habit in from eight to twelve days, and that without the acute mental suffering which is commonly felt when an enslaving habit is quickly broken off. Drs. Van Renterghem and Van Eeden (of Amsterdam) likewise tell me that they have had great success in overcoming these moral diseases. At Nancy I had the opportunity of seeing many such cases in process of cure. One man came to Dr. Liébeault completely shattered by indulgence in tobacco, which he both smoked and chewed. He was a railway porter, a big, strongly-built fellow, but he was weak and shaky through his excesses. His digestion was faulty, his tongue thickly furred, and he had no appetite. His pulse was slow and intermittent, he felt giddiness on movement, and his sight frequently vanished through incipient amaurosis. Persons whose nervous systems are broken down in this way are very easily hypnotized, and Liébeault soon had this man in a state of profound sleep. He then told him that he was to give up smoking, that a pipe was to be to him an object of loathing, and a quid of tobacco even more offensive; also that, if he did indulge in one or the other, pain and sickness would be the result, so that he must not even feel a desire for the indulgence.

* April, 1897.

The patient came daily for several mornings, and daily showed an increasing improvement, till in a week he was completely cured of the symptoms of nicotine-poisoning. He would, of course, have been cured by voluntary abstention from tobacco, but I doubt if the beneficial effect would have been so rapid; and no one seeing the man would have credited him with the moral courage and determination necessary for breaking off a long-cherished habit. It is told of the younger Dumas that he was formerly an inveterate smoker, and on one occasion, feeling out of health, went to consult his doctor, with the usual cigar in his mouth. The physician, one in whom Dumas had entire confidence, having heard his symptoms, told him plainly that smoking was destruction for him, whereupon the great writer immediately flung away his cigar, declaring that he would never smoke another—and he kept his word. But how many are gifted with such resolution ?* I am afraid most doctors share my experience, and find that patients come to us, not to be cured of their bad habits, but to be relieved of the suffering resulting therefrom.

There are many cases on record where this abandonment of a cherished habit has been accomplished without hypnotism. A man who has caused the death of one dear to him in some drunken brawl is very likely, if he has any good in him, to conceive a horror and dislike for intoxicants, and to become a reformed character.

* A near relation of my own underwent hypnotic treatment at Nancy for the cure of the tobacco habit in 1891, and his experience is interesting. After being a great smoker for years, he formed the resolution of giving up the weed, as he found that it was causing nervousness and palpitation. Dr. Liébeault never induced in him more than a slight drowsiness, with inability to open the eyes, and yet the effect of suggestion was immediate and remarkable. Tobacco almost at once became distasteful to him, and he did not smoke again for years. Now he is a very moderate smoker. Probably in this case the patient would have been able to reform himself unaided; but Liébeault saved him from a good deal of suffering, and very likely from some relapses.

An interesting patient of the same kind was an American lady who used to smoke between thirty and forty cigarettes a day, and wished to be cured. She proved a good subject, and at once gave up the habit without difficulty.

In many cases the good is thus so overshadowed and hidden by the evil that its presence is overlooked. Hypnotism, at any rate, enables us, under favourable conditions, to suppress the evil, and thus give the good a chance of showing itself, and it is possible that it may even enable us to create good qualities in course of time.

In the *Revue de l'Hypnotisme*, 1886-1887, some papers appear by the late Dr. Auguste Voisin, of the Salpêtrière, showing the efficacy of suggestion in the treatment of moral obliquity; and at the Congress of the French Association for the Advancement of Science, held at Nancy in 1886, papers dealing with this subject were read by several physicians of eminence. Voisin gives instances of female prisoners, formerly considered incorrigible, who, after a course of suggestive treatment (combined with the religious and moral instruction, which alone had, unfortunately, proved ineffectual), became modest, cleanly, and industrious. Some of these reformed women have been placed in situations of trust, which they hold satisfactorily. His mantle seems to have fallen on his cousin, Dr. Jules Voisin, also physician to the Salpêtrière, who is equally enthusiastic and successful in treating moral delinquents by suggestion (*Revue de l'Hypnotisme*, July, 1900). I give a case from my own practice later on (p. 312), and Dr. Osgood Mason has had similar experience. In fact, the evidence as to the reformative efficacy of hypnotism is overwhelming and convincing.

In a most interesting article by F. W. H. Myers,* Dr. E. Dufour, the chief physician of the Saint-Robert Asylum (Isère), is quoted as follows: 'From this time our opinion is settled, and we have no fear of being deceived when we affirm that hypnotism can render service in the treatment of mental disease.' 'In common with most inquirers, Dufour finds only a small proportion of lunatics hypnotizable,' says Myers, 'but the effect produced on these is uniformly good. His best subject is a depraved

* 'Multiplex Personality,' Proceedings of the Society of Psychical Research, vol. iv., 1886-1887.

young man, who, after many convictions for crimes, including attempted murder, became insane.' Dr. Dufour assures us that this difficult subject has become a reformed character through the influence of hypnotism.

Forel gives a case of reformation in a confirmed drunkard seventy years of age, who, after twice attempting suicide, was placed under his care. He spent nine years in the asylum, during which he gave an infinite amount of trouble, drinking himself into a state of insanity whenever an opportunity offered, and inciting the other patients to rebellion.

In 1887 Forel hypnotized this apparently incorrigible subject, and treated him by suggestion. He proved susceptible, and after a few sittings became an utterly changed character. He proved his reformation by voluntarily giving up a small quantity of wine which had been allowed him, and joining the Temperance Society, which hitherto he had vilified and opposed. It was now safe to allow him full liberty, as the formerly attractive wine-shops were no longer any temptation to him. Forel adds that afterwards he was occasionally hypnotized for purposes of demonstration, the relief of rheumatism, and the removal of double senile cataract by operation, but required no further anti-alcoholic suggestion.*

It is interesting to consider in this connection how far it is possible to modify inherited or acquired habits by hypnotism, and I deal with this most important subject later on.

It is certain that suggestion has a twenty-fold greater influence in the hypnotic than in the waking state, and it is probable that many criminal and weak persons might be reformed by its continued employment. They would be educated or re-educated.

But I believe that the environment must at the same time be suitable, and that had Forel's patient been able to mix with his evil associates after each hypnotization,

* The old man died in 1895, after a second operation for rectal carcinoma, performed under hypnotic anæsthesia.

the good would have been checked in the bud by the excess of evil.

It is supposed that hypnotic suggestion causes inhibition, of psychical origin, of nerve tracts, and it is possible that it enables new nervous arrangements and combinations to be formed by directing nerve energy into new or little-used channels.

Association of ideas plays a very important part in all our sentiments and actions, and this association is certainly strengthened by hypnotism. This explains the success of the treatment in many cases of drunkenness. A good plan in these cases is to suggest dislike for alcohol, and even vomiting at the taste of it. If the patient is then made to swallow a small quantity and sickness follows, and he is told, while in the hypnotic state, that such will be the invariable consequence of indulgence, we shall have established a train of very disagreeable associations which will for a long time, and perhaps always, be connected with the first step in alcoholic indulgence. It may be objected that the association of a drunkard's ideas with alcoholism cannot naturally be pleasant, as excess is always followed by illness. But ordinarily sickness and disgust come *after* excess, while hypnotism causes them to precede it. We frequently see the action of association of ideas where hypnotism is not in question at all. For instance, I know a lady to whom the taste of strawberry jam is most disagreeable and nauseating, because, as a child, on two or three occasions evil-tasting powders were given to her disguised in it.

The same lady tells me that the sight of a bottle from which she had been dosed with castor oil used to arouse a feeling of nausea long after she had been emancipated from such compulsory medication. But similar instances are so common that they must occur to the mind of everyone.

Alcoholic intoxication is sometimes accompanied by distinct double personality, but this is rarely so well marked as in the case of a farmer referred to by Professor

Ball. This man was a dipsomaniac, and frequently got drunk while attending the markets. In this state, however, he continued to transact business, and apparently with considerable judgment and ability. But on becoming sober he would be quite unconscious of what had taken place, and his business suffered severely in consequence. He hit upon the idea of keeping a notebook for use during his drunken state, and he found that by doing so he was able to preserve a written record of his operations, which supplied the hiatus in his memory ('Maladies Mentales,' p. 79). Oblivion of actions committed in a state of drunkenness is, of course, common enough, and there are numbers of cases on record where men have been hanged for murders of which those unhappy criminals had preserved no recollection. By special stimulation of the brain cells, alcohol may arouse the phlegmatic and dull-minded man to temporary brilliancy, and so induce what appears to be change of character; but this change is generally more apparent than real. Alcohol, as a rule, does not change character, but emphasizes its features, *in vino veritas*, though it sometimes effects very complete changes in a man's conduct. The penurious may become lavish, and the morose man may assume an air of jollity. Here probably the alcohol acts by removing those inhibitory processes which are the result of education, and so allowing the natural characteristics free play. Hypnotic suggestion does not enable us to create force, but only to transform it, nor to create characteristics, but merely to modify them. I cannot think that hypnotism would make a naturally morose man permanently amiable, or a violent-tempered man quiet and gentle. But if the natural temperament has been altered by circumstances, or has not been allowed to develop, I see no reason why hypnotism should not bring out what is latent and suppress the acquired traits, and this applies especially in the case of children.*

* The following extract from a letter recently received from an American lady is, I think, instructive in this connection. The writer, Dr. M. Goldson, of Oakland, California, came to London

In such examples one would say that there are two separate entities dwelling within a single bodily form, and that one of these can be brought out and developed, while the other is so absolutely suppressed as to appear non-existent. To some extent this is indeed the case with everybody. The best of us can feel a suppressed evil self struggling at times to get the upper hand; the worst are dimly conscious of some crushed-down better self striving within them, however rarely and feebly. It is in a weakened or diseased brain condition that this psychological fact becomes startlingly manifest. Dr. W. Ireland* gives the case of a young man of good character, who, after an epileptic seizure, took possession of a carriage which he found in the street, drove to his father's grave a mile and a half away, gathered some flowers which grew there, and took them home to his mother. She was naturally alarmed at his conduct, and bade him take the carriage back to its owner; but instead of doing this he left it at a livery-stable in his own name. When he recovered his normal state of health, it was found that he had no recollection whatever of this circumstance. On another occasion, again after an attack, he engaged himself as a sailor, but was soon found by his shipmates to

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to attend the post-graduate lectures, and I gave her some instruction in hypnotism, which she is now turning to account in her practice. 'I have recently hypnotized a lady, Mrs. R——, who has been lately married. Her happiness was greatly marred by the conduct of her husband, who took the greatest delight in teasing her; the more she showed her annoyance, the worse he became. She took this so much to heart that she became profoundly depressed, and was continually in tears when alone. I hypnotized her, and suggested that she should no longer feel grieved or annoyed at his conduct, but should enter into his jokes with amusement, and should enjoy his merriment and be completely happy. The treatment was entirely successful, and after the fifth sitting Mrs. R—— reported that a complete change had come over her life, and that her husband was astonished to find that she no longer resented his jokes at her expense, but seemed rather to enjoy them.' It seems to me quite likely that if Mrs. Goldson had quietly talked to Mrs. R—— and given her sensible advice, the desired result might have been obtained; but no doubt hypnotism, by increasing the patient's mental receptivity, greatly aided the action of suggestion.

* 'The Dual Function of the Double Brain.'

be utterly ignorant of seamanship, and extremely strange and flighty in manner. In a short time he recovered his usual consciousness, and was amazed to find himself on board ship and far from land, for he had quite forgotten the series of events which had led him there. It would be interesting to see what view a judge would take of the legal responsibility incurred in such a case.

But far more remarkable are the cases of Louis V—— and Félida X——. The former is well described by F. W. H. Myers* (*op. cit.*). Louis V—— was born in 1863; his mother was a woman of ill-character, and, as a natural consequence, he fell early into evil ways. At the age of ten he was sent to a reformatory, where he showed himself docile and obedient. Four years later he was frightened by a viper, and this fright brought about a series of convulsions and hysterical attacks, which left him with hysterical paralysis of the lower limbs. He became worse, and in 1880 was sent to the asylum at Bonneval, suffering from periodical epileptiform fits, and from paraplegia. He was now a quiet, well-mannered boy of seventeen, and the change in him for the worse was as yet merely physical. He had, indeed, forgotten how to read and write, but this was probably to be accounted for by want of practice, for he distinctly remembered his life before entering the reformatory, and was deeply ashamed of it. He was employed at tailoring for two months; then he had a severe attack of hystero-epilepsy, after which he slept for several hours. He awoke from his sleep entirely free from paralysis, and got up, intending to work in the fields, as he had been used to do at the reformatory, where he now believed himself to be. He walked with comparative ease, though somewhat uncertainly, a consequence of muscular atrophy from disuse of the limbs. He recognized no one about him, and had entirely gone back to the time before his fright.

* Fully described in medical detail by Dr. A. T. Myers in *Journal of Mental Science*, 1886.

His disposition was completely changed. From being quiet and tractable, he had become quite the reverse, and he was found out in a theft. In 1881 he escaped from Bonneval, and after a few years, which he spent partly in drifting about from hospital to prison, partly as a private of marines, he was sent to the asylum of Rochefort, having been convicted of a theft, but judged to be of unsound mind. Here he came under the care of Drs. Bourru and Burot, who carefully observed his case, as Dr. Camuset at Bonneval and Dr. Jules Voisin at Bicêtre had already done.

At Rochefort he developed hemiplegia of the right side, with consequent indistinctness and difficulty of speech, notwithstanding which he was extremely impudent and abusive, and ready to expound his theories, which were all adverse to established authority. He could now remember only detached vicious periods of his past life. Contact with metals (metallo-therapy) was tried upon him: silver, lead, zinc, and copper had little or no effect, but when a bar of steel was laid upon his paralyzed arm, the hemiplegia shifted from the right side to the left, which became insensible. Such a physical change is not uncommon, but the coincident mental change was unexpected and startling. Louis V—— had become another creature. The insolent and unmanageable patient was now gentle, modest, and respectful. His speech was once more distinct, but he now declined to give any opinion on important matters, declaring himself unable to judge of them wisely. His experiences as a marine were absolutely forgotten, and he remembered only the more reputable epochs of his life.

These two contrary conditions, evil and good, were by his physicians called his first and second states, and from them several intermediate and varying states could be produced. His ' fifth state ' was especially curious. By being placed in an electric bath, or having a magnet applied to his head, he could for a time be wholly cured of paralysis. He became light and active as a healthy

child, and on questioning him it was found that he had indeed gone back to childhood. He was again at the reformatory, and all his life after his fright from the viper was an utter blank. But let him be in any way reminded of that circumstance, and he fell at once into an epileptiform condition, which left him in his ' first ' or ' second ' state.

Louis V—— is now no longer at Rochefort, and, according to the last account of him, his health and psychical status are both much improved.

The physicians who have had charge of this extraordinary case agree in supposing that the various observed changes point to a dual action of the brain, and the unstable preponderance of one hemisphere. The imperfect speech and violent, insolent conduct associated with the right hemiplegia, in contrast with the clear speech and self-controlled demeanour which accompanied the left hemiplegia, show the contrasting tendencies (in this case) of the supremacy of the right and left hemispheres respectively.

Such marked effects of brain duality seldom appear spontaneously, except among the insane, idiots, and sufferers from brain disease or delirium. Dr. Ireland gives a case of double personality, which he has witnessed in an idiot boy named Finlay. This lad would talk to himself, and argue as if two persons were discussing a question. Sometimes he would thrash himself, saying, ' Finlay is a bad boy to-day,' and then would cry out with pain in his own personality. In some cases, where insanity follows upon injury or disease of one half of the brain, the patient is conscious of the struggle for mastery which is being carried on within him. The organism which remains sound controls the insane impulses of that portion which is damaged, until at last it becomes tired out, and partakes of the common intellectual ruin.

A most remarkable case of double personality is that of Félida X——, which is fully described by the late

Dr. Azam,* Professor in the University of Bordeaux. Félida was born in 1843, of respectable parents. From childhood she showed a melancholy and reserved disposition. She was subject to hæmoptysis, and dwelt continually on her bad health. At the age of fourteen and a half her first transformation occurred. After a sudden pain in her head she fell into a short trance, from which she awoke completely metamorphosed. She was now bright and lively, very loquacious, and even noisy. Her health seemed improved, and she did not complain of any ailment. But after a few hours she again fell into a trance, and awoke to find herself in her first or normal state. Henceforth she passed her life alternately in one or the other of those two conditions. For some time the 'second state' did not occupy more than a tenth part of her existence, but by 1875 the relative duration of the two states, which had been changing by degrees, had become reversed, so that she was nearly always in the second state. In this latter condition her memory of the past is complete, but in her first state all that has occurred in her second is utterly forgotten. Hence have ensued some curious complications; for instance, while in her second state she showed a very decided preference for a young man, whom in her first she completely ignored. On one occasion she was attending the funeral of a friend, and while returning home in the carriage she had an access of trance, which lasted only a few minutes, and aroused no remark. She awoke in her first state, without any recollection of why she was in the carriage, or whose funeral she had been following. By questioning, however, she managed to set herself right without betraying her change of personality. In due time Félida married and became the mother of several children, but the alternation of personality went on as before, and assuredly she could have no secrets from her husband, as in her

* 'Hypnotisme, Double Conscience,' etc., Paris, 1887. One of the most interesting histories ever written, Professor Azam being a master of style as well as a scientific observer of the first rank.

second state she revealed everything she had done in her first, even though she had intended to keep it secret.

Both Louis V—— and Félida X—— proved excellent subjects for hypnotism, and in the case of the former hypnotism produced the same alternation of personality as did metallo-therapy. In this case it seems fair to attribute to its use by Drs. Bourru and Burot some of the credit of his recovery and reformation.

In the cases of Louis V—— and Félida X—— hypnotism seemed to produce still another phase of personality, but Dr. Richard Hodgson describes a very interesting case of double personality in which hypnotism evoked the 'second state.' The subject was an itinerant preacher, named Ansel Bourne, sixty-one years of age, who one morning disappeared mysteriously from his home, and in spite of the efforts of his friends remained undiscovered for two months. He woke up one morning at Norristown, Pennsylvania, to find that he was keeping a small general shop under the name of A. J. Brown. He had been engaged in this occupation for six weeks, and had appeared to his neighbours as a perfectly normal individual. As a matter of fact, he had been in a state of somnambulism all the time, and he knew nothing on awaking of what had befallen him since he had fallen into a trance whilst walking in the streets of the town where he had been living. Professor James and Dr. Hodgson hypnotized him, and in the hypnotic state he resumed the personality of A. J. Brown, and told his audience what he had been doing during his residence at Norristown and how he got there.*

A few years ago I met with a curious case of double personality. The patient is a bank clerk, aged forty, with a record of over twenty years' satisfactory service. He left the bank one Friday after luncheon, and did not return until the following Monday, when he found he had been suspended for absence without leave. He could give

* Proceedings of the Society for Psychical Research, July, 1891.

no explanation of his conduct beyond that he had found himself late on Saturday night in a strange hotel at Southampton. How he got there he didn't know, but he found in his pocket some postal orders issued at Guildford, so he concluded he had visited that town. I hypnotized him, and he at once became somnambulic. He replied to questions, and gradually gave us a complete history of his doings from the time he left the bank until he 'came to himself' at Southampton. He had gone first to call on a friend in the West End, and then on another friend in the suburbs. He had spent Friday night in a temperance hotel, and had gone to the station in the morning and taken the first train which happened to be going to Guildford. There he alighted and had breakfast. The previous day he had changed a cheque, so he had ten pounds in gold in his purse. This he found heavy, so he exchanged the sovereigns for postal orders. Then he felt he should like some sea-air, and took the train to Southampton, where he formed the plan of taking a coasting steamer to Dublin, a trip he had formerly made with enjoyment. He strolled about Southampton, behaving much as an ordinary visitor, and engaged a room at an hotel. At this hotel he suddenly 'came to himself,' and was astonished to find himself in a strange place. He was just in time to catch the last train to London, where he stayed the night, and thence returned to his anxious family in the country the following morning. His friends were naturally somewhat sceptical, and it was perhaps fortunate for him that some of them had heard of double consciousness.

By hypnotism one was able to tap, as it were, the submerged level of consciousness which had prevailed during the thirty-two hours' alteration of personality. It was a period of some excitement whilst we extracted from him sentence by sentence the way he had spent his time, and the question occurred as to what duty would demand if it turned out to be a case of Dr. Jekyll and Mr. Hyde, and our patient confessed while hypnotized to having com-

mitted an atrocious crime. But the second personality of a middle-aged bank clerk could hardly be expected to soar to any very great height, or to descend to any great depth, and so it proved. But there did seem to exist in the second personality a peculiar absence of forethought and responsibility, and a tendency to act on the impulse of the moment, so that no definite plans were formed, and there was no compunction felt at the inconvenience caused in the bank or the panic felt at his home.

I have seen two other cases of double personality during the last few years. One of these was a patient of Dr. Albert Wilson's, and the case is very fully and ably described by Dr. Wilson in the Proceedings of the Society for Psychical Research, January, 1904. The girl was under Dr. Wilson's observation for several years, and developed at least six independent personalities. She is now settled down in the most satisfactory of these as a city typewriter. The *British Medical Journal* has reported a series of cases by Dr. Hyslop.* Such cases are probably more common than was formerly supposed, and now that they are becoming more understood, patients will be less averse to telling their experiences. They involve a problem of extraordinary psychical interest; our individuality depends upon a continuity of memory and consistency of action, and the upsetting of these conditions introduces an embarrassing break in the chain of cause and effect.†

Some of the French experimenters have in the hypnotic state made middle-aged people feel again the sentiments of their childhood, and write, talk, and behave as they did

* On 'Double Consciousness,' by T. B. Hyslop, M.D., Medical Superintendent of Bethlehem Royal Hospital, etc., *British Medical Journal*, September 23, 1899.

† Double and multiplex personality is now considered a splitting up of consciousness, one strain or system of complexes, as it were, taking possession and determining conduct. Dr. Mitchell ably discusses the whole subject, and illustrates it by apposite cases, in the Medical Number of the Proceedings for Psychical Research, November, 1912. There is also another similar case in the *S.P.R. Journal*, 1920.

when children of six or seven. Miss Goodrich Freer in her experiments has shown how she reproduces forgotten memories by crystal-gazing, and Dr. Morton Prince has published his experiments in the same field with a highly sensitive, hysterical young lady. In this patient he was able to induce a second and a third personality by hypnotism, very different to her ordinary self. Normally Miss X——, as he calls her, is reserved, morbidly conscientious, self-contained, serious, deferential and shy. In her second state (X—— 2) she is sad, serious, and gives the impression of weariness and suffering. X—— 3 is flippant, jovial, free from all physical infirmities, full of fun, reckless, and contemptuous of the normal self, X—— 1, whom she stigmatizes as silly, stupid and dull, and of whom she makes great fun. Nothing seems to amuse her more than the recital of the woes and worries of X—— 1.

For instance, Miss X—— one morning came to Dr. Prince in a very disturbed state of mind. She had lost the money she had set aside for her stay in Boston, and was almost penniless. She was put into the profound state of hypnosis, wherein she developed the personality of X—— 3, and then described how stupid X—— 1 had felt nervous about her money the night before, and had got up from her bed and hidden it under the table-cloth, and X—— 3 seemed greatly amused at the embarrassment caused by this loss of money. Dr. Prince awoke her, and, without telling her anything, asked her to look in a crystal. She did so, and described the scene which presented itself: she saw herself in bed in her room; then she saw herself get up, her eyes being closed, and walk up and down the room, go up to the bureau, take the money from the drawer, and hide it under the table-cloth. This proved to be the correct explanation of the loss, which was thus put right.

To show the conflict of personality: on one occasion as X—— 3 she tore up and threw away a bundle of bank-notes so as to annoy and embarrass X—— 1. In her

normal state she knew nothing of this, and thought she had been robbed. Dr. Prince hypnotized her, and brought back the personality of X—— 3, who confessed the deed with malignant satisfaction the next morning.

The end of this case is that Dr. Prince cured her of the ailments she consulted him for, and by suggestion suppressed the somewhat inconvenient personality of X——3.

An exciting story was thus cut short, for the curative aim of the physician is occasionally in conflict with the claims of the psychical researcher; and one sometimes feels it a duty in the interest of the patient to put a stop to interesting developments.

I do not mean to imply that 'seers' are always hysterical and in poor health; on the contrary, Miss Freer, who has been already referred to, is a lady of great talent and practical achievements in many directions; and I understand from Professor James and Dr. Hodgson that the well-known Mrs. Piper, whose case they have investigated with such care, is a healthy woman, and appears to be benefited by carefully conducted psychical experiments. But rash and ignorant experimentation on such subjects is strongly to be deprecated.

These cases throw some light on much which goes by the name of clairvoyance and occultism, and it is, I think, a healthy sign that a physician of Dr. Morton Prince's position should be ready to investigate such phenomena.*

Myers' theory is that both by hypnotism and crystal-gazing one taps the 'subliminal consciousness,' and thus gets into touch with a far wider field of experience than our everyday consciousness supplies.

I have called the first state of Félida X—— 'normal,' but should it be thus called merely because it happened to be the first? It is incomparably inferior to her second state, which has now almost entirely replaced it. In this second state Félida is frank and cheerful in her manner,

* 'An Experimental Study of Visions,' by Morton Prince, M.D., Physician for Diseases of the Nervous System, Boston City Hospital, *Brain*, Winter, 1898.

an active woman of business, and an excellent mother.* In her now rarely recurring first state—her *état bête*, as she herself calls it—she is reserved, gloomy, and selfish. Which of these two is her sane, her truly natural condition? which her abnormal? Such instances lead us to inquire, Can the good effects which in this woman occurred spontaneously be brought about by outward means? The reassuring answer is that they can be, and have been, thus brought about, and in the future will be wrought more frequently and more completely. The newer hypnotism is still a young science, and before the physician and the moral reformer lies a vast field of psychical possibilities still to be explored.

Richet† describes how by hypnotic suggestion he changed an enthusiastic Bonapartist into an equally enthusiastic Republican, who furthermore recognized her conversion. 'Vive Gambetta!' cried this lady. 'A veil seems torn away! How mistaken I have been about him!' The effects of such an experiment as this are of course superficial and transitory, but such incidents point to possible induced moral changes, which may be rendered deep and permanent.

Richet (*op. cit.*, p. 250) and A. Pitres (*Revue de l'Hypnotisme*, December, 1890) suppose that personality depends upon memory of previous events and their relation to one's self, and that this condition is never affected in the lighter grades of hypnosis, and only with comparative rarity in the deeper states of somnambulism. According to Pitres we find alteration of personality taking place in three different ways—by alternation, alienation, and reversion. All these occur under certain circumstances in the waking state, and they may be induced in susceptible subjects by hypnotic suggestion. Thus, Azam (*op. cit.*, p. 245) mentions the case of an insane patient who always told him of her own symptoms as if they be-

* The changes are chiefly psychical. In both states she suffers from chronic asthma and general delicacy of health.

† 'L'Homme et l'Intelligence': Appendix.

longed to a friend: 'I wish to consult you about a tumour which she has in her breast, and which causes her great pain,' etc., the person meant being herself. The way in which children speak of themselves in the third person is a matter of common observation. 'Freddy is a good boy, Freddy wants to go to bed,' etc. It is probable that, as memory is extremely limited in young children, their individuality and personality is vague and undeveloped. In insanity it is common enough to meet patients who believe themselves to be other people, generally of historical or present celebrity or importance. In the advanced hypnotic state it is often possible to make the patient believe and act as if he were any person whose name is suggested to him, and he will endeavour to act the character exactly like one under insane delusion. It is this feature of hypnotism which is brought into such requisition by platform professors, and to the ignorant and careless it is a matter of merriment to see a stalwart countryman imagine himself a baby or a schoolgirl, or to see a young girl act the part of a general. For sex presents no bar to the reception of suggestions. The cases of change of personality by alternation cannot be better illustrated than by the foregoing ones of Louis V—— and Félida X——. Examples of alternation of personality by reversion are not uncommon in medical practice. A patient in delirium frequently fancies himself a boy again, and, forgetting everything which has occurred in recent years, will remember and act over again trivial scenes of an apparently long-forgotten childhood. Dr. Pitres (*loc. cit.*) gives an interesting account of a hysterical patient who had frequent attacks of amnesia, during which the events of the preceding few years were absolutely forgotten, so that it was impossible to make her recognize her friends of the time. Not only did she speak and act as she had done in her youth, but it was evident that her mind was working in exactly the same way as it had done then. Pitres found he could at any time produce this reversion by making her fix her attention strongly on

some event in her past life, and then hypnotizing her while she so thought of it; and he obtained the same result by pressing on certain parts of the body which seemed to act as ideogenic zones. In the case of Albertine M—— she suffered from hemianæsthesia in her normal condition, but if by hypnotic suggestion she was put back to a period prior to the incident of this symptom—*i.e.*, to her childhood—this condition no longer was present. Just as we have seen in the case of Louis V——, *per contra*, the induction of paralytic symptoms brought the patient into the mental condition which went with this symptom. The two cases are most instructive as showing the very close relationship between psychical changes and physical states.

Auguste Voisin used to keep some of his patients for long periods of time in a state of altered personality; and there is no doubt but that in affecting moral reformation we do not so much create new personality as bring out traits of character which have either been forgotten or have remained undeveloped.

Liébeault describes the case of a Pole who was under his treatment for epilepsy. The man was very excitable, and had been a soldier in the Polish rebellion. After each attack he became so violent that it took six men to hold him in bed. During his violent struggles he would shout and declaim as though in the heat of a desperate engagement, and even after he had become calm and quiet he would for some minutes believe that he had been fighting in a battle, and would recite the incidents he thought he had witnessed. The vision was always the same: a desperate fight against overwhelming odds, a town in flames, and the whole scene illuminated by a moon of fantastic form.*

The head-master of a boys' school tells me that he is obtaining good results in the suggestive treatment of moral disease and of mental torpor, and some of his pupils declare that when they have been hypnotized their

* 'Thérapeutique Suggestive,' p. 142.

sums ' come easier ' to them than usual. Some time since I was called upon to treat a case of moral perversity in a young girl, and she greatly improved under the influence of suggestion. From being idle and rebellious, she has, so I am told by her teachers, become docile, and has developed a decided aptitude for study. A ' chronic ' medical student, in about his tenth year, who consulted me occasionally, assured me that my treatment ' wound up ' his intellectual machinery, so that he could work several hours a day after each visit. As this gentleman was only slightly hypnotizable, I do not take much credit to myself for this good effect; but I do claim for hypnotism the results achieved in another case, also that of a medical student. The patient was not only idle, but was addicted to drink and dissipation. At heart, however, he was a good fellow, and was much beloved by his friends. He came to me in despair, assuring me hypnotism was his last chance, and that if it failed he should shoot himself. It succeeded, and he is now in good practice, with an excellent wife, and every prospect of a life of happiness and usefulness.

Wingfield relates the effect of hypnotism on one of his Cambridge subjects. The young man was clever and well-meaning, but an inveterate idler, and could not settle to work. In a state of profound hypnosis Dr. Wingfield ' suggested ' that he should retire to his rooms every evening after dinner and settle down to steady work until midnight, that he should ' sport his oak ' and deny himself to his friends, and that he should pass his forthcoming examination. The suggestions succeeded perfectly, and in six weeks the patient passed a good examination, much to his own delight and to the surprise of his friends. Wingfield's book is full of similar good stories. For instance, that of the very prosaic young man who was told to write a poem on the boat-race. This he actually did, and thought the inspiration proceeded from within. Unfortunately the verses are terrible doggerel.

Liébeault tells of a schoolboy who was hypnotized as

an encouragement to his younger brother, the real patient. He proved such a good subject that it seemed a pity to waste the opportunity, and the doctor therefore 'suggested' great industry and hard work, so that he might rise to the top of his class. The boy was intelligent but idle, and the suggestion had such effect that for three weeks he worked hard and did occupy the top of his class instead of his usual place at the bottom. But he gradually deteriorated; his mother wanted to take him to Liébeault again, but the boy absolutely refused to go, for he said he didn't like that doctor, because what he did made him work too hard.

On the other hand, Vincent relates how he suggested to a history student that the Battle of Hastings was fought in 1067; for several days, if asked for the date, he gave that, and stuck to it. Then there is the story of a French accountant, whose books all went wrong because he was told, when profoundly hypnotized, that two and three made six. Such an upsetting of one's experience and knowledge would not last long without repetition of the suggestion, for the mental pendulum would swing back to its normal position, as in the case of Mrs. S—— and the cat (p. 77).

I have been asked to treat several children who were unsatisfactory. In one case a boy of fourteen wrote to me from a public school, asking me to hypnotize him to enable him to overcome certain bad habits and the intellectual lassitude which he supposed to be their result. The boy proved an excellent subject, and responded perfectly to the suggestions I made. He worked so well that he took a good scholarship, and afterwards became a high wrangler at Cambridge. Medical men and parents often notice that boys about the age of puberty become idle and unsatisfactory, and such cases require very careful management, as the boy's future is at stake. Hypnotic suggestion in good hands is very useful in tiding over this critical period.

It should be clearly understood that the use of hypnotic

suggestion as an educational influence should be carefully restricted, and never allowed to interfere with the healthy development of individual character. It should be reserved for cases where there is inherited or acquired vicious tendency, and should even then be resorted to only when other means have been fairly tried and found ineffectual. We know that in some young persons there is a complete breakdown of the moral self, while in some others it seems entirely absent, and it is for children of this debased or deteriorated type—such children as abound in our reformatories—that this moral treatment will prove most useful. I would especially mention its power to cure the inherited craving for alcohol, which so frequently appears in the neuropathic children of drunken parents. In an article contributed to the *Medical Annual* for 1898 I laid great stress on the value of hypnotic suggestion as a *corrector of bad heredity*, and of all the uses of hypnotism I believe this to be the greatest.

Bérillon,* as Government Medical Inspector of Public Asylums in France, has great facilities for studying abnormal children, and he has employed hypnotic suggestion largely in correcting vicious tendencies. He has made a special study of degeneration in children, and among the signs of this condition he reckons nail-biting (*onychophagie*), nocturnal enuresis, masturbation, and excessive pusillanimity. These conditions are very amenable to hypnotic treatment. Dr. Osgood Mason is enthusiastic about the value of hypnotism in educating unmanageable and backward children, and he gives many remarkable examples in his interesting book, ' Hypnotism and Suggestion in Therapeutics, Education and Reform ' (London, 1901). He relates, too, how he made a badly educated but intelligent woman become a fairly good speller by telling her to observe and remember while reading how the words looked and were spelt.

* Dr. Bérillon's services to the State have recently been acknowledged by his being created a *chevalier* of the Legion of Honour. A banquet to celebrate the occasion was attended by the *élite* of the profession.

Many persons have objected to the educational use of hypnotic suggestion, on the ground that it is a tampering with the ' free-will ' of those influenced. It is true enough that the will should not be *weakened*, but who would say that it should not be interfered with ? Is it not a fact that all education and all moral training are an interference with free-will ? The child who delights in school-work needs no coercion to application. The child—if such a one there be—who has no moral faults whatever requires no exhortations to unselfishness, truthfulness, and other good qualities. But most children prefer play to work. Some will tell a lie to escape punishment; all, so it seems, have a variety of failings and bad habits, so that reformative and preventive means must be used to train them to industry, truth-telling, and general excellence of conduct. It is, as I have said, only when those ordinary means have failed that hypnotic suggestion should be employed, and then it should work on the same lines as all judicious education: the child should not be made to obey like a slave or an automaton, but should be guided by suggestion, as by a wise teacher, to practise *auto*-suggestion, and thus, by his own will-power, to aid in the overcoming of bad habits and the acquiring of good ones.

Some enthusiastic advocates of hypnotism argue that, as nearly all normal children are readily hypnotized; as it is much more easy to hypnotize patients who have been operated on previously; and as conditions are very likely to arise in after-life in which the induction of hypnosis would be of advantage for combating pain, inducing sleep or anæsthesia, or correcting evil habits, it is very desirable to hypnotize every child, so as to be able to invoke the agent when required.

I confess I have no sympathy with such a contention, but, on the contrary, incline to the opinion of a medical friend who says he would rather have his child naturally naughty than hypnotically good—if by ' naturally ' he means the ordinary faults and shortcomings of free, happy, and healthy childhood. If he were the parent of

such a child as is described on p. 325, I dare say this gentleman would modify his opinion, and be glad to employ the only remedy which, as far as I know, is available in such cases.

When the mental powers are deficient by reason of faulty brain structure, hypnotism cannot, of course, do much. No one professes to create new grey matter by hypnotic suggestion. Still, the records of our asylums show that even when the brain is almost rudimentary, educational influence may be successful in producing decent and orderly habits. But in complete idiotcy it is almost impossible to hypnotize, and suggestions are powerless through want of *point d'appui*.

At the Nancy Congress, Liébeault and others gave instances of dull, idle, and unmanageable children who by suggestion (combined in some cases with judicious home influence) were made models of industry and good behaviour. Schoolboys who had habitually kept at the bottom of their form were by this treatment so incited to work that they soon occupied a place at the other end. Another child, seven years of age, so obtuse as to be almost an idiot, was so benefited by suggestion that in three months he could read, write, and understand the four rules of arithmetic.

What other remedy but hypnotism can be suggested in such a case as the following, which I treated in 1895? A lady interested in reformatory work brought me a girl of fifteen to see if hypnotism could help her. She was a workhouse child of degenerate type, but not imbecile. She had been placed in two different situations as servant, and in each case had been sent away for theft. At the home she was put to laundry work, and there being nothing else to steal, she used to steal the soap and the other girls' bread-and-butter. These she hid away, but made no use of.

She proved a good hypnotic subject, and I suggested that in future she should know she was doing wrong when she stole, and should be able to refrain; that she should

work industriously, and be honest, truthful, and attentive. In all these qualities she was deficient, but after being hypnotized a few times a great improvement was perceptible, and she was sent to a third situation. When I last heard of her she was keeping quite normal and giving satisfaction, so one has good reason to consider it a permanent cure. Hypnotism probably saved the girl from a life of misery and crime, for kleptomania is not recognized among the poor.

Hack-Tuke, speaking of 'moral insanity' (*Journal of Mental Science*, 1885), well puts it when he says that in cases of this description, where, perhaps, the disposition and actions of one member of a family will by their perversity bring untold suffering on his relations, there is undue development of the lower or automatic functions, whilst the higher centres are defective, and that it should be our object to correct this disproportion by suppressing some functions and developing others. If (he goes on to say) the horses drawing a coach run away in consequence of the driver being drunk, it is not the horses we should blame for the accident, but the incapable driver who is no longer able to hold the reins. We know that badness may proceed from two causes, which Hack-Tuke calls immoral resolution—positively bad, and moral irresolution —negatively bad. It is probable that in either case, if the offender were caught young, hypnotic suggestion would prove a valuable adjunct to other reformative agencies.

In course of time the new personality, induced by suggestion and encouraged by religious ministration and teaching, will displace the old, and a complete moral revolution will be the result.

One is frequently asked whether the cures worked by suggestion are of a permanent character. To this we reply, they are as permanent as cures effected by any other means. Relapses occur in many diseases, no matter what treatment has been employed—sometimes through some carelessness on the part of the patient or of those who have charge of him. A person who is cured of rheumatism

to-day may to-morrow get fresh cold and develop a new attack, or other symptoms. But with proper attention, and the customary precautions as regards diet, rest, temperature, etc., the success of this treatment is not transitory. The improvement effected by its means is often so marked and so rapid that patients are tempted to discontinue its use, and return to their ordinary habits before the cure is perfected and the habit of disease broken. They forget that when a diseased condition has existed for some time it probably has taken firm hold on the system, and is not to be dispelled in a day. Sudden cures by hypnotism are apt to be fallacious, as they are by other modes of treatment. Though brilliant results are often attained, they can never be counted upon, and there should be no disappointment when improvement is a little delayed.

I have certainly found two statements commonly made about the treatment to be erroneous. The first, that the effects are temporary, and that amelioration of the symptoms is followed by speedy relapse and a deeper sinking into the slough; and the second, that if a relapse occurs, the patient will not a second time be benefited by the treatment. I have treated patients for various ailments who were cured many years ago and have had no relapse; others who, from the nature of their disease, have experienced relapses, have almost invariably been relieved by subsequent hypnotization, and more speedily than on the first occasion.

On the very threshold a difficulty may occur: the patient will perhaps appear insusceptible. This need not cause discouragement, for in many cases the hypnotic influence is not felt until after three or more sittings. Comparatively few persons remain insusceptible* to it;

* See tables, p. 62. An apparent trifle may cause one operator to fail where another will succeed at once. I know a very able foreign physician, who completely failed to influence two English patients, because he smelt of garlic, and so called up disturbing emotions in their minds. I was once unsuccessful with a gentleman, who afterwards told me the reason of my failure. He imagined, as many do, that it is essential for the operator to possess great strength both of mind and body. When I touched

and when once it is established, the hypnotic state is afterwards more easily induced, and tends also to become more intense, though this does not necessarily follow.

It is very difficult to eradicate a deeply-rooted popular belief, and it is not very easy for a practitioner of the suggestive system to avoid being called a magnetizer, since artificially induced sleep is the common preliminary of the treatment. But, as I have already stated, Liébeault and his disciples absolutely reject the fanciful theories regarding animal magnetism which were held fifty years ago. They contend that no unusual gifts are needed to practise the system, and that the chief requisite is confidence. (The footnote on p. 117 shows how want of confidence may be detected by the patient, and how the very suspicion of it will cause failure.) With wider experience comes increased confidence in one's self and in the system, followed naturally by increased success.

But ' Majus remedium majus venenum ' is a true saying, and it would be an exception to all rule if such a powerful remedy as suggestion were not liable to abuse. When dynamite was discovered, no one denied that the lawless and desperate would, if possible, turn it to bad account, yet it was not tabooed for this reason, but its manufacture and distribution have been surrounded by precautions and restrictions, and it is allowed to occupy its proper place in applied science in the hands of miners and engineers. It is interesting to read in contemporary records the controversy which raged round the introduction of chloroform into medical practice sixty years ago. All manner

his eyes to close them, he observed a slight tremor in my hand, and attributed this to a physical or mental weakness, which, he argued, must prevent my influencing him—a stranger, and a strong man of high intellectual capacity. The idea called up a resistance, which rendered him insusceptible. Subsequently, when I had explained to him that my personal attributes were, in this matter, of no consequence whatever, he easily fell into a profound hypnotic sleep. There is, however, a proportion of sane persons —perhaps 10 per cent.—who are to all intents and purposes unhypnotizable. This insusceptibility seems to depend upon idiosyncrasy, and is neither a sign of commanding intelligence nor the reverse.

of evils, physical, religious, and moral, were foretold as certain to follow man's temerity in interfering with the laws of Nature; but Sir James Simpson was a doughty champion, and was not prevented from making public his grand discovery because nervous people were afraid it might be employed for evil purposes; nor is its use forbidden, though every year a certain percentage of crimes and outrages are committed by its aid.* Poisoning by arsenic, corrosive sublimate, and digitalis sometimes occur, and yet these drugs occupy a prominent place in the pharmacopœia; for it is found that, although these powerful agents are sometimes used to inflict harm, the evil caused by their illegitimate employment is so outweighed by their usefulness that no one would think of suppressing them. So with hypnotism. Its power for good is undoubted; it fills a place that nothing else can fill so adequately, and used with proper precautions and under necessary restrictions, it is perfectly safe.

Dr. Sémal, in the discussion on hypnotism in the Belgian Academy of Medicine (June 30, 1888), having condemned the prostitution of the system by travelling *prestidigitateurs* and charlatans, spoke strongly in favour of having it included in the medical curriculum of the Universities, as being the only legitimate means of making it known. 'This course,' he said, 'would prevent its being used empirically and stupidly, and would keep it as a powerful therapeutic agent in the hands of the medical profession so long as the art of healing is practised.' It is distressing to have to record that after all these years there is still no provision made in our medical schools for instruction in hypnotic practice, and

* I am informed by credible witnesses, who were living in Edinburgh at the time, that Professor Simpson used to invite his friends to his house to experiment with the new agent, and it was quite common for several of the guests to narcotize themselves that they might compare experiences. This affords another analogy between the introduction of hypnotism and that of chloroform, and we may hope that as chloroform soon got beyond the popular and experimental stage, so may hypnotism be freed from its platform and drawing-room exponents.

the ordinary student is still pitifully ignorant of normal and abnormal psychology. There seems to be a fear that hypnotic would supplant orthodox treatment and undermine established usages. One might as well argue against teaching the value of vaccine therapy. Both forms of treatment are but auxiliary and complementary to the science of medicine.

The exploitation of hypnotism as an exhibition at public entertainments has already been prohibited by law in Switzerland, Holland, and other countries, and when the true position of this treatment is understood among us, the same restrictions will probably be enforced in England.* 'The performance of experiments in public,' write Binet and Féré (*op. cit.*), 'should be condemned, just as we condemn public dissection of the dead body and vivisection in public. It is certain that there are still graver objections to hypnotic exhibitions, since they are liable to produce nervous affections even in those who do not propose to be the subjects of experiment.' Such experiments are always useless and often cruel, besides being an offence against the dignity of humanity. The contortions and exclamations of a patient under chloroform are often interesting, and might by some persons be thought amusing, but we should hardly choose to excite them for the gratification of idle curiosity or the entertainment of the multitude.

By all means let people be made aware of the existence and nature of an influence to which most of us are susceptible, and some to a dangerous degree; for to be forewarned is to be forearmed, and we shall not have foolish persons playing with such an edged tool if they knew how serious may be the consequences of their trifling. A paragraph which lately went the round of the papers shows how ignorance may lead to awkward results. A couple of young men went to a café after attending a

* One of the objects of the International Congress of physicians practising hypnotism, which was held in Paris in 1889, was to pass a strong resolution dealing with this question, and calling upon Governments to render public exhibitions of hypnotism illegal.

'magnetic' performance, and one of them, full of what he had seen, proposed 'magnetizing' the barmaid. She consented, and he imitated the 'passes' made by the lecturer. Very soon the subject fell into a hypnotic trance, from which neither of the young men could arouse her. Like Ali Baba's brother, they had got into forbidden regions, and did not know the password which should let them out. The police were sent for, the young woman was taken to the hospital, where after a time she awoke, and the operator was arrested and locked up.

The following case came under my own notice, for my advice was sought by the much-perplexed experimenter:

A young man, after a few lessons from a public magnetizer, went to stay in a country house where, among other guests, was a young lady of well-marked hysterical temperament. To show off his recently-acquired knowledge, and to afford a little amusement, he undertook to hypnotize this girl, and after a few minutes' employment of the method known as *fascination*, the subject fell into a profound trance. He had some difficulty in arousing her, and ever since she has had frequently recurring fits of cataleptic trance, which are always ushered in by an outburst of screaming, in which she cries: 'He is doing it now!' She is under the impression that the young man is constantly exercising a power over her, though he is hundreds of miles away, and her nervous system is reduced to a state which causes serious alarm to her family. That her idea is absurd, and that such action at a distance is impossible, renders the matter none the less painful for the young lady and her family, or less awkward for the rash experimenter. Such an occurrence naturally fills people's minds with dislike and distrust for hypnotism, for they confuse a wanton and clumsily-conducted experiment with a medical treatment of which hypnotism forms only a preliminary step.*

* A story told by the late Professor Christison of Edinburgh bears on this point. He one day mesmerized a highly nervous lady, and when she awoke he told her that the following day, at

On the occasion of an academic discussion on hypnotism at the annual meeting of the British Medical Association, at Birmingham, in 1890, I read extracts from letters I had received from the best-known physicians practising hypnotism at home and abroad. Bernheim, Moll, Forel, Van Eeden, Milne Bramwell, and others, all wrote that they had never seen any injurious effects follow the use of hypnotism by trustworthy hands. Liébeault told me that in his thirty years' experience he had had no bad results, and referred me to an article he had recently published, entitled 'Confession d'un Médecin Hypnotiseur,'* in which he has set forth the little mishaps which have happened from time to time in his clinique.

I was extremely glad to get this mass of testimony, as it disposed of an idea, not confined only to the uneducated, that medical hypnotism may induce epilepsy, hysteria, chorea, etc. The late Dr. A. T. Myers also informed me that the subjects he had seen hypnotized many scores of times for the Society for Psychical Research, over long periods of time, were none the worse for their experience. Liébeault is undoubtedly perfectly correct when he states that where any evil result has followed the treatment, it has been due to want of skill or judgment on the part of the operator. I am convinced that hypnotism is an agent requiring careful handling in many cases. This was brought home to a medical friend of mine, whose experience is worth recording. He was attending a lady suffering from bronchitis complicated with asthma and a weak and fatty heart. He thought to quiet her spasmodic attacks by suggestion, and he induced a state of profound

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noon, he would repeat the operation from a distance. At that hour the Professor was lecturing, and had quite forgotten the occurrence; nevertheless, the lady, in spite of all her husband could do to prevent it, fell into a profound trance, and said she felt she was being mesmerized. Expectant attention and auto-suggestion produced the effect, and such is found to be the explanation of most of the stories which are foisted upon a credulous public.

* *Op. cit.*, p. 308.

hypnosis with great facility. He continued to suggest easier and quieter breathing, and was pleased to see how the patient responded and how respiration became more and more tranquil. He had not hypnotized many people, and looked upon the process as being quite unattended with risk, until the breathing, having become more and more feeble, suddenly stopped altogether, and the heart-beat became imperceptible. My friend feared the patient would have died—the first victim of hypnotic suggestion —and was intensely relieved when the spasmodic breathing was again heard. As far as I know, no record exists of its having proved fatal. Heidenhain refers to experiments of this kind as being distinctly dangerous, and states how he nearly stopped the action of his brother's heart by continued suggestion.

But while contending that the risks of hypnotism in proper hands are infinitesimal, we are strongly impressed with the belief that its use by the ignorant or ill-disposed is fraught with most serious risk to health. Dr. M. J. Nolan relates, in the *Journal of Mental Science* (January, 1891), a case of stuporose insanity which he believes was due to the ignorant employment of hypnotism. The patient was a drunken and dissipated soldier, broken in health by his excesses, and he was hypnotized by a travelling 'professor.' Van Eeden (*loc. cit.*) records a case of hystero-epilepsy brought on in the same way, and Charcot (*Revue de l'Hypnotisme*, July, 1889) contributes notes of a case in which a woman, after being frequently hypnotized by a magnetizer at a fair, became aphasic for several months, and suffered in health in other ways. Dr. Gilles de la Tourette read a paper dealing with this subject before the Paris Society of Legal Medicine in December, 1888 (*Revue de l'Hypnotisme*, January, 1889), and demonstrated how the passage of magnetizers through the towns of France had been followed by serious epidemics of hysteria and other nervous troubles.* He

* 'Dangers de l'Hypnotisme et interdiction des représentations théâtrales' (*Ann. d'Hygiène*, vol. xxi., Paris, 1889).

adds: ' Our country (France) has become the refuge of all the magnetizers, and their advertisements cover the walls of Paris.' Such a complaint can no longer be made, for public performances are now forbidden by the municipality. England is now almost the last refuge of the expatriated magnetizers.

The late Sir F. Cruise* mentions a case in which an attack of brain fever followed the induction of hypnosis by an ignorant and irresponsible operator, and deduces from this and other cases the argument that ' it is highly improper and possibly dangerous for anyone who is not an educated physician, and familiar with the practice, to attempt hypnotism, and that it should never be induced without due reason, precaution, and design.'

Dr. Dejerine, Professeur Agrégé of the Faculty of Medicine in Paris, is convinced that the continual making of injurious and absurd suggestions is fraught with evil consequences to the subject, and especially so if the hallucinations are allowed to persist over considerable periods of time. He says the time may arrive when the operator may find himself unable to remove the morbid symptoms he has called into being (*Revue de l'Hypnotisme,* January, 1891). But he adds that he has never seen hypnotism produce any bad effects when it has been properly used.

Dr. Julius Solow† records a case where an amateur hypnotist hypnotized a friend by making him look fixedly at a diamond ring. The subject had severe convulsions and lost the power of speech. Subsequently, looking at any bright object caused him to become violently excited. Commenting on this case, the *British Medical Journal* says (March 28, 1891):

' It should be a warning to amateur hypnotizers and to the foolish people who allow themselves to be played upon by these dangerous showmen. . . . It ought to be understood that hypnotism recklessly played with is capable of doing very serious mischief, and it is the duty of the

* *Dublin Journal of Medical Science,* May, 1891.
† *New York Medical Journal,* March 14, 1891.

medical profession in every town to warn the public of the serious risks which are being run.'

The case of Ilma S——, so fully described by Krafft-Ebing,* is frequently quoted as an example of the dangers of hypnotism, and it gives us some idea of what must be the mental condition of the unfortunate persons who are being constantly hypnotized by professional showmen.

Several Italian observers have recorded cases of grave mental troubles following the abuse of hypnotism by public showmen and others. Fiegerio describes a case where the subject, a young woman, after being experimented on by Donato, became affected with spontaneous somnambulism, accompanied by impulsive tendencies to strike and destroy (*American Journal of Insanity*, April, 1891).

If a patient should take it into her head to imagine that one was having an undue personal influence over her, as in the case referred to on p. 121, the course to adopt is plain. The physician should decline to operate again, and if the idea persists, he should obtain the assistance of a colleague, whom he should get to hypnotize the patient for him, and to suggest to her the disappearance of the delusion. I have found it necessary to act thus in one case, and the plan was completely successful. The patient, a highly hysterical lady of a certain age, and unmarried, developed a craving for hypnotism in much the same way as she might have for alcohol or morphia.†

* Quoted in *Brain*, April, 1891.

† Every form of treatment is liable to abuse. I have seen two striking examples of this in Weir-Mitchell cases. The rest and frequent feeding proved so agreeable to the patients that they continued this part of the treatment when they returned to their homes.

The first of these patients was a middle-aged clergyman, who became neurasthenic after an attack of influenza. After he left the nursing-home, he made his wife continue to feed him every four hours, and used to lie in bed all the time, except for a few hours on Sunday, when he got up and conducted service in his church. He came to me for hypnotic treatment, weighing 20 stone, and in a curious apathetic state. I succeeded in stirring him up and making him change his habits. He had been an extremely active and zealous missionary clergyman, so one had

There is another reason for the careful regulation of the use of hypnotism which should appeal to all those who have the progress of science at heart. The process of hypnotizing an ordinary subject is so simple that it seems absurd to talk of teaching it to a person of ordinary intelligence and liberal education; to see it done a few times is to be able to do it one's self. Of course, this is the least part of the treatment, and, in fact, it bears the same relation to the Nancy method as the administration of chloroform does to a subsequent surgical operation. The practice of hypnotic suggestion is surrounded by pitfalls which only the operator with a medical training can avoid, and the results of the treatment are only of scientific value if they have been checked by investigators accustomed to gauge the value of evidence. At the present time, when the treatment is, we may say, in its infancy, we want every fact scientifically investigated, and therefore it is of great importance to restrict the medical use of hypnotism to qualified medical men.* If Dr. Elliotson, a physician of rare ability, and a man of unimpeachable probity, had acted with the discretion shown by Bernheim and other foreign physicians, he would probably have arrived at the truth which it required another generation to extract from a mass of superincumbent rubbish.

There is another danger from the ignorant use of hypnotism as a remedial agent. I cannot agree with some writers who seem to contend that pain must not be inter-

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good material at bottom to work upon. The other case was that of a lady, who, when dismissed from the nursing-home, straightway took to her bed, and got her maid to feed her every two hours. She added excessive drinking to overfeeding, and, as we could not get her to change her mode of life, she soon died of cirrhosis of the liver and fatty heart.

Both these patients discontinued one essential detail of Weir-Mitchell's treatment—the massage, which renders it possible for the system to assimilate the large amount of food consumed.

* I allude, of course, to medical hypnotism, with which I am chiefly interested. The scientific value of work done by such trained observers as Messrs. Gurney and Myers has been already referred to.

fered with, as it is a part of Nature's recuperative process.* It is often a danger-signal which should not be neglected, and covering the signal does not do away with the danger it denotes, but one need not go on waving it indefinitely. I have heard of a patient suffering from gastric ulcer being told by an ignorant magnetizer that she was to go home and eat a beefsteak, and a man with mitral disease directed to run up to the top of a high house. So great is the power of suggestion, that in both these cases the order was obeyed, and the symptoms were masked for a time. One can sometimes remove the effect without touching the cause. But this is true of all symptomatic treatment.

Some persons, especially some young women, are so susceptible that one has only to get their consent and to bid them go to sleep to induce a condition of profound somnambulism. In such cases 'expectant attention' alone seems sufficient, and it is matter for surprise that we do not find more people falling into spontaneous somnambulism, as the condition is so easily induced.

It is these subjects of unstable cerebral equilibrium who are most liable to danger from the abuse of hypnotism, and it is these, consequently, that we should especially seek to protect. I need hardly say that the use of hypnotism towards the accomplishment of a crime or misdemeanour should be regarded as a serious aggravation of the offence.

Charcot in France, Ladame in Switzerland, and Sémal in Belgium, have done much to stop the public exhibition of hypnotism in those countries, by demonstrating the physical and mental evils which have befallen the subjects of such performances. Those who witnessed a so-called entertainment of this kind given in London some years since must remember how fatigued and languid, or excited and hysterical, were many of the subjects. The aim of a public entertainer is to excite wonder or mirth in the

* *Vide* article by Dr. Sinclair Thomson in the *Westminster Review*, December, 1890.

minds of his audience, and so long as he can evoke a sufficiently startling note, he cares little, even if he fully understands, that the instrument he plays upon is the delicate organism of the higher brain centres.*

The practitioner who uses hypnotism should do so with the same precautions which he adopts in administering an anæsthetic. Chief among these are obtaining the formal consent of the patient, and, when expedient, of his friends, and never operating save in the presence of at least one witness. Thus he will guard himself and his patient from all possible imputation of wrong-doing or abuse of power. I need hardly add that a patient desiring hypnotic treatment will, if commonly prudent, use discrimination in choosing a physician, and will avoid placing himself under the influence of one not known to him, at least by reputation.

The dangers of hypnotism are, I believe, exaggerated. The stories told of persons obtaining undue influence over others by its means are mostly fables, which experience shows to be impossible. Bernheim asserts, and is borne out by other observers, that no one can be hypnotized against his wish, and that, in fact, it is his own will which sends him to sleep. Nevertheless, there is no doubt that after a time the oncoming of sleep is less under the patient's control, and when, as we see sometimes at Nancy, a person is continually being hypnotized by the same operator, the hypnotic state can be reproduced with surprising readiness. I believe that in certain hysterical

* Apprehension of danger rests very frequently upon the misconception that loss of volition and amnesia are ordinary accompaniments of medical hypnotism. Such an idea arises from witnessing public performances, and it is difficult to eradicate. The physician who employs hypnotism as a remedial agent neither seeks to obtain somnambulism—in which state alone the patient's memory and will-power are seriously affected—nor, as a matter of fact, does it occur, except in a small proportion of cases. The condition ordinarily attained—and here I can speak from personal experience—is one of gentle lethargy, very similar in character to that agreeable state between sleeping and waking which most of us experience when, after being called in the morning, we give ourselves five minutes' grace before getting up.

cases there arises a craving for this, as there might for any other sedative; but such a craving has little chance of being encouraged if the suggestive practice is confined to its proper sphere. A physician does not go on prescribing narcotic drugs because a patient has a craving for them, but, on the contrary, forbids their use when they cease to be beneficial.

The physician practising suggestion may protect his over-sensitive patients from the dangers of being hypnotized by a stranger. He has only to impress upon them, while they are in the hypnotic state, that no one can produce any such effect upon them without their free-will and formal consent. The most practised operator would try his art in vain upon one so protected, as Liébeault and Bernheim have repeatedly proved,* and as I myself have seen. I always safeguard my more susceptible patients against the danger of being hypnotized against their will by telling them that no one will be able to influence them without their previous consent in writing, and I find this plan acts admirably. In fact, the more susceptible the patient, the greater the effect of this deterrent suggestion, so that I have seen practised operators experiment on such subjects without producing any other effect but restlessness and discomfort. In one case, that of a young girl, who is one of my best subjects, I asked her to allow a lady doctor to hypnotize her, and she gave her consent. Nevertheless, she proved quite insusceptible to the lady's persevering attempts. The patient told me afterwards that she had a very strong objection to being hypnotized by a stranger, and that her consent was only assumed.

* These physicians were in the habit of hypnotizing a hysterical patient, who used to fall into somnambulism as easily in the hands of one as in those of the other. On one occasion, while she was in this state, Bernheim told her that she was not to be influenced by Liébeault. She awoke quite oblivious of this suggestion having been made, and soon afterwards went to Liébeault, who was ignorant of what had taken place, and asked him to hypnotize her as usual. To the surprise of both patient and doctor, all his attempts to do so were futile, and it was only on communicating the fact to Dr. Bernheim that his colleague found its explanation.

Disregard of this simple precaution was to my mind one of the most regrettable features of the late Dr. Luys's clinique. Some of the young women there seemed to be at the mercy of anyone who cared to exert an influence over them.

One is sometimes asked, even by medical men, if the fact of having hypnotized a patient does not enable the practitioner to exercise more than the proper amount of influence over him in future. Nothing of this kind is at all likely to happen, and the doctor who uses hypnotism will find neither more nor less gratitude from his patients than if he employed more material remedies. The importation of hypnotism into a recent case, however, shows the danger the medical attendant may incur by running counter to popular prejudice, and how necessary it is for him to safeguard himself (*vide* p. 401).

I may fitly bring this chapter to a close with a quotation from Professor Bernheim's oft-referred-to work: ' It is the duty of the physician to select what is useful in suggestion, and to apply it for the benefit of his patients. When, in the presence of sickness, I think that therapeutic suggestion has a chance of success, I should consider myself to blame as a physician if I did not propose it to my patient, and if I did not even make a point of getting his consent to its employment ' (*op. cit.*, p. 580).

CHAPTER VI

Some Points in the Physiology and Psychology of Hypnotism.—Authorities and their Theories.—Expectant Attention, Suggestion, and Inhibition.—Induction of Functional Aphasia, and what it teaches.—Exaggeration or Suppression of Certain Senses and Functions in the Hypnotic State.—Automatism in Hypnotism and in the Pathological State.—Amnesia.—Hypnotism compared with the Action of Poisons.—The Double Brain: its Single Action in Health and Possible Dual Action in Disease and in the Hypnotic State.—Cases illustrating this.—The Induction of Automatism without Hypnotism.

The study of hypnotism will doubtless do much to advance our knowledge of the higher brain functions, and it is well to bear in mind that, as the phenomena depend upon an induced psychical condition, they may not be explicable by any physiological method which we at present possess. McDougall* thinks that enlightenment will come from the psychological rather than the physiological side, and Wingfield strongly favours that view. Charcot, Richet, Bernheim, Heidenhain, Hack-Tuke, Ferrier, Hughlings Jackson, and others, have, however, done most useful work by building up a working hypothesis, which serves as a standpoint for future investigators.

Expectant attention, suggestion, and inhibition are the processes which afford an explanation of the commonest phenomena.

Expectant attention seems to be a necessary psychical preparation, for an ordinary person may gaze at an object for an indefinite time without producing hypnosis, unless he expects such a result to ensue. Were this not so, spontaneous somnambulism would be of very common occurrence.

* 'Body and Mind,' p. 350.

Brown-Séquard and other neurologists show that when one cerebral centre or function is used to excess, the others become, for the time being, paralyzed or inhibited; and Dr. Maudsley says ('The Pathology of the Mind,' p. 58) that two nerve centres of mental function cannot be in equally conscious function at the same time. Continuous stimulation of one centre implies diminished activity of those surrounding it—including those of higher cerebration: volition, attention, co-ordination of ideas, and memory—and causes their temporary inhibition. This is seen in everyday life. When reading an interesting book, we greatly exert our intellectual and emotional faculties, and consequently impressions on other senses are not registered or noticed. A noise in the street is unheard by us; a coal may fall on the hearthrug, and we neither see the accident nor are affected by the smell of burning wool; even bodily pain and mental suffering may be forgotten or benumbed while the attention is thus absorbed. Everyone knows how gentle friction of a skin surface, in neuralgia or headache, will often act in the same way, by over-stimulating one sensory centre, and rendering inactive that which registers the pain.

Heidenhain attributes the hypnotic state to monotonous gentle stimulation of a sense, causing inhibition of the cortical cells, with consequent suspension of the higher cerebral functions. A monotonous sound or scene will thus induce drowsiness or sleep, and a sudden intense stimulation, such as a sudden noise or flash of light, will cause an awakening. This is seen at magnetic séances, where the sleepers are commonly aroused by the sound of a gong.

Let us consider what happens when a person is profoundly hypnotized for the first time by fixation of the eyes upon a brilliant object. As his attention is exclusively directed to one sensory impression, he becomes more and more withdrawn from other conditions of the environment, until at last he sees only the object, and is conscious

of nothing else. But in time, as the optic centres become exhausted and cease to respond to continued stimulation, the visual sense likewise becomes extinct, and the subject is left in a condition of mental vacuity and 'senselessness.' He has been reduced from a state of polyideism, which is the normal condition of the healthy man, who is constantly receiving and balancing multiform impressions derived from all the avenues of sense, first, to a state of monoideism—the idea of a fixed image, upon which he must keep his eyes and attention; and, finally, to a state of vacuity, in which there is complete absence of ideas. Into this swept and garnished chamber of the mind ideas can be implanted by the hypnotist; and, as a ray of light thrown into a darkened room will show forth with exaggerated force and brilliancy from the contrast with the surrounding darkness and the exclusion of conflicting rays, so will the idea suggested to the imagination of the profoundly hypnotized subject operate with immensely increased effect from the absence of conflicting and corrective impressions derived from the whole environment.

As the patient, on recovering consciousness, in some cases may continue the speech or occupation which was interrupted by an injury to the brain, so the hypnotized person, on being aroused, will sometimes carry on a phrase or an action from the point at which it was broken off by hypnotic influence, thus showing how completely the brain, as the organ of mind, has been paralyzed. But whereas in the coma of disease the paralysis is absolute and complete, in induced somnambulism it is partially or entirely removable at the command of the operator. He can arouse any centre to more than its normal functioning activity, so that the subject, who a moment before was insensible to the fumes of strong ammonia held close to his nostrils, will now recognize the faintest odour; and he who now lies in a condition of muscular impotence will, at the word of the operator, perform extraordinary feats of strength. The same holds good with the expression of the emotions. From a state of abject misery, the subject

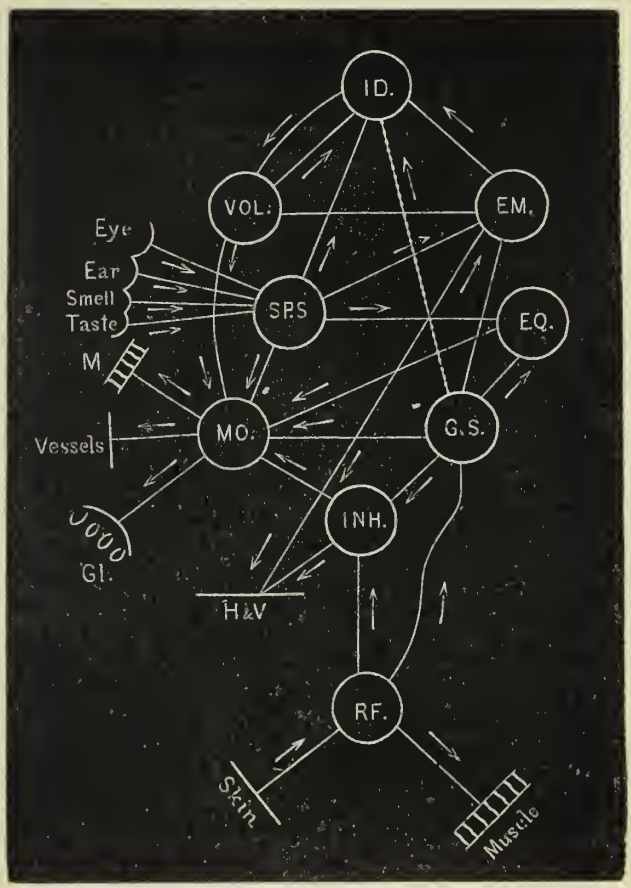
may be suddenly transported to one of bliss, and be it noted that he shows both conditions far more markedly than he would do if awake; for in the normal state our emotions are subject to that inhibitory influence which we call self-control, and which is non-existent in the somnambulic subject, over whom each passion, each emotion that is called up, has for the moment an undivided sway.

If I am told to raise my arm, the order is conveyed to the auditory centre, and thence referred to the ganglionic cells of the cortex, in which the highest functions—attention, volition, comparison, etc.—may be supposed to reside; if endorsed by the will, it is despatched through the motor centres, basal ganglia, and spinal cord to the muscles, which perform the required action. Even if my will refuses to obey the order, it may happen that an involuntary stimulus is sent downwards, sufficient to cause some slight muscular movement, which, however, is promptly checked by the inhibitory action of the highest centres. But suppose the order is given in an imperative tone to one accustomed to obey the voice of authority—a soldier,* for example—it will probably be executed automatically, without any functioning whatever of the will; the command is referred from the auditory centres, where it is taken in, direct to the motor centres, and through the basal ganglia to the muscles of the arm. In such a case, a like order has been so frequently followed by its execution that the two have become cause and effect, and the action is automatic or cerebro-reflex, and almost beyond the man's control. A hypnotized subject is in much the same position; his intellectual centres do not work, and an order suggests

* There is a well-known story of an old soldier who, while carrying home his Sunday dinner, was hailed by a practical joker, who called 'Attention!' His arms immediately fell into the required position, and the dinner rolled in the gutter. Assuredly, volition had no voice in this matter.

The subjoined diagram (adapted from the 'Encyclopædia Britannica,' article 'Physiology') will assist the comprehension of voluntary and automatic actions.

its fulfilment without, and, indeed, sometimes contrary to, volition and reason.



Id., Ideational centre; Vol., Volitional centre; Em., Emotional centre; Sp. S., Centres for special sensations; Eq., Centre for sense of equilibrium; Mo., Motor centre; G. S., Centre for general sensation; Inh., Inhibitory centre; Rf., Reflex centre; M., Muscle; Gl., Gland; H. and V., Heart and Vessels. The lines show the association of one centre with the others, and the arrows indicate the direction taken by nervous impulses. Hypnotism may be supposed to cut off or inhibit some of these associations—*e.g.*, the volitional from the motor.

A severe mental shock will sometimes induce this automatism; the various duties and actions of everyday

life will then be gone through as in a dream, and often without leaving any recollection of their performance. A severe blow on the head will occasionally bring about a like condition, as in the case of a gentleman, aged twenty-one, a patient of mine, who was thrown from his horse while hunting. He subsequently recollected riding at the fence at which he came to grief, but had totally forgotten everything that followed until the end of the run, which lasted for about fifteen minutes after his fall. Yet I have the report of eye-witnesses, who state that he was up in a moment, mounted his horse, and joined the field as if nothing had happened, but that he wore a dazed expression, and made unintelligible answers to the remarks addressed to him. He is always a plucky rider, but on this occasion he surpassed himself, taking a dangerous fence which only one other horseman attempted, and which he would probably have avoided had his reasoning faculties been at work. He felt a severe pain in the vertex, which had been struck in his fall, and for a few hours remained in a somewhat dazed condition.

There is no memory of acts done in the somnambulic state, because that association of centres and balancing of one mental function by another which constitute ideation, self-control, attention, volition, comparison, and memory are for the time being rendered inoperative. A patient under hypnotic influence may be compared to a complicated machine, which is thrown out of gear, and yet can be so adjusted that some parts can be made to act independently of the others.

As regards the physical basis of the phenomena, recent researches in physiology enable us to form a fair working hypothesis. Heidenhain supposed that there must be anæmia of the brain, until he found that his brother could be hypnotized as easily as usual immediately after taking a physiological dose of amyl nitrite.

Dr. Barwise thinks nitrite of amyl, by lowering the blood tension, leads to congestion of the membranes of the brain, and that these exert direct pressure on the

contained organ, and so empty its vessels. He finds that his best hypnotic subjects blush readily, and that they commonly become flushed while being hypnotized. He also finds that persons may be more easily hypnotized if the head is bent back so as to obstruct the return of venous blood from the brain. He therefore supposes that hypnosis depends upon congestion of the membranes with coincident anæmia of the cerebrum.*

Dr. Gerald Yeo, late Professor of Physiology at King's College, thinks Heidenhain's inference that nitrite of amyl causes general congestion of the brain is not a necessary corollary of the fact that it produces flushing of the face. He supposes that in hypnosis we have a condition of partial and local anæmia of certain areas of the cortex.

Dr. Yeo has made a special study of hypnotism, and his lecture before the King's College Science Society in 1883 was almost the first serious attempt in this country to bring modern physiological science to bear on the subject. Starting from the analogy afforded by the innervation of the heart, which is supplied with excitor and inhibitory centres, he argues that the more complex an organ the greater will be the need of a double check action, and he considers the brain the most complex of all the organs. He supposes that the functioning of the cortical cells, which forms the basis of higher cerebration, depends, as does the activity of other organs, upon their supply of blood, and to regulate their supply he infers the existence of centres which he calls neuro-regulatory. Their action is of two kinds—neuro-inhibitory and excito-neural.

The excito-neural centres watch over the nutrition of the brain cells, and are, in fact, trophic centres for the cortex. The neuro-regulatory centres are kept *au courant* with the condition of each organ, and its wants and capabilities, through thin connecting fibres; and they act accordingly, either exciting or inhibiting their representative centres in the brain. When the blood-supply is cut

* *Op. cit.*, p. 12.

off from the cortical centres the functions of higher cerebration are inhibited altogether or in part, and unconsciousness or altered conditions of consciousness results. Some conditions of the organism cause a response from the neuro-regulatory centres in the form of an inhibitory impulse which puts the organ or function represented out of action, and others, on the contrary, convey a dynamogenic impulse to the regulatory centres. The influences which cause excito-neural action are stimuli having a great degree of intensity—*e.g.*, pain, noise, mental anxiety. The influences which produce neuro-inhibitory action, with consequent decreased functioning of the cortical cells, are muscular and mental fatigue (with the coincident accumulation of waste products), and monotonous continuous stimulation of a sensory organ. This stimulation causes an impulse resembling that due to local fatigue to be sent to the neuro-regulatory centres, and these respond by inhibiting the activity of the cortical cells.

Preyer is inclined to consider hypnosis as a cortical neurosis, dependent on disturbance of the functions of the grey matter, due either to its inhibition or excessive activity. He supposes that hypnotizability indicates an abnormal amount of instability of the cells of the highest centres, and that in hypnosis the nutrition of the cortex is altered by the accumulation in its cells of oxidizable waste products (lactates). Unless we can speak of normal sleep as a neurosis, I should object to the term being applied to its hypnotic analogue as confusing, and as somewhat committing us to a theory.

Dr. Lehmann, lecturer on Experimental Psychology at the University of Copenhagen, has published the lectures he gave in 1889, and his book is one of the best which have been written on the subject. He works out very carefully the causation of natural sleep and the points wherein it differs from hypnosis. He considers that hypnosis closely resembles natural sleep, but differs from it in that the process is arrested or cut short before complete unconsciousness is reached. Sensation depends upon atten-

tion, and attention implies increased supply of nutrition to the part of the sensorium affected. In hypnotism parts of the sensorium are maintained in a state of activity by the attention of the subject being directed to them by the suggestions of the operator. There is increased nutrition of certain centres, with corresponding innutrition of others, and the phenomena produced are the outcome of these changes in cortical nutrition. In the waking state there is continuous stimulation of the vasomotor centres proceeding from the sensorium, and cessation of mental activity from fatigue or other cause brings about a discontinuance of the stimulation, with resulting relaxation and dilatation of the cerebral vessels and blood stasis. Lehmann points out that functional activity depends on the amount of blood passing through an organ, and not on the amount present at a given time. In hypnosis he supposes there is a condition of tetanic contraction affecting the bloodvessels of the active part of the brain, and this tonic condition leads to increased rapidity of the flow of blood through them, increased nutrition of the part, and increased functional activity. The result of blood stasis from withdrawal of the stimulating influences arriving at the vasomotor centres from the sensorium is drowsiness and sleep, and in ordinary sleep this condition affects equally the whole of the hemispheres. In hypnosis it is partial, and can be modified by the suggestions of the hypnotist, and the subject under his direction dreams a series of dreams. In the transformation of the natural into the hypnotic sleep the subject is so far awakened by the voice of the hypnotist as to be enabled to act upon his suggestions, but not sufficiently to regain the use of all the faculties. See also review in *Mind*, July, 1891.

Forel goes deeply into the physiology and psychology of hypnotism, and quotes largely from the writings of Oscar Vogt. The student is referred to these for a full exposition of the theories advanced. They explain fairly satisfactorily nearly all the most striking phenomena of

hypnosis, including catalepsy, sensory anæsthesia and hyperæsthesia, paralysis by suggestion, etc., on the physical side, and monoideism, amnesia, suggested hallucinations and negative hallucinations, etc., on the psychical side. It is interesting to note that Forel's ideas are generally in tune with those of Liébeault, though probably they are arrived at by quite different processes of thought. Forel calls the nerve waves or activities neurokymes. Consciousness is the subjective side of concentrated cerebral activities. Attention is the maximum of our psychical activity, and depends upon concentration of the neurokymes in one direction with corresponding deflexion from other centres, for they tend towards the centre in which the greatest metabolic activity prevails. He likens attention to a shifting functional macula lutea in the brain, and it has also been compared to the changing of a kaleidoscope. Stored-up impressions (memories) and hereditary instincts render certain centres in the individual more excitable than others, and the arrival at these of comparatively few or weak neurokymes is sufficient to cause them to function. Forel holds with Vogt that all psychical phenomena, as well as movements, are produced by peripheral stimuli, and that no movements originate in the brain. He supposes there is a subcortical sleep centre, and that this is stimulated by the arrival and accumulation there of neurokymes, set in motion by suggestion, hypnotic or otherwise.

No two centres can be in fullest functional activity at the same time. For instance, if a certain centre A is alone excited, it will dominate consciousness until the centre of gravity is changed by the arrival of neurokymes at B. Attention will then be deflected from A to B. This is the explanation of delusions and hallucinations, Forel thinks, and to illustrate this point he takes the case of a person awaiting a visitor. A noise on the stairs is interpreted as the footsteps of the looked-for guest. Expectation has so strengthened the stored memory impression that the new sounds are assimilated and given

the accustomed place in consciousness—*i.e.*, the footsteps of the expected visitor.

The phenomena of hypnotism are, therefore, I take it, according to Forel, due to directed attention and psychical inhibition and dynamo-genesis, which physiologically depend on altered local cortical blood-supply and nutrition.

Forel is an uncompromising opponent of occultism, and even telepathy is to him unproved and inadmissible.

Other observers consider that there is a condition of cramp of the arterioles of the brain; and all are agreed that delicate modifications in the cerebral circulation constitute the basis of the hypnotic phenomena. We have probably no drug which acts exactly in the same way as hypnotism; otherwise we might use it as a vehicle for suggestion, especially in the case of patients who are insensible to the hypnotic influence. Cannabis indica presents certain analogous symptoms,* and apparently

* If the following story is correct (and I have no reason to doubt my informant), the action of chloroform may, under certain circumstances, be considered analogous to hypnotism. At one of the large Metropolitan hospitals there existed, about forty years ago, a club of medical students, called the 'Chloroform Club,' the chief object of which was to test the action of narcotics, and especially of chloroform. The members met in each other's rooms, and consumed physiological doses of various drugs. On this remembered occasion chloroform was the narcotic chosen, and one of the members was, as usual, told off to keep sober and watch his companions. But the temptation proved too great for him, and he also inhaled a considerable dose of the poison. Into this room full of drug-excited young men came a late member who was extremely unpopular with the others, and one of them shouted, 'Here's —— ! Let us kill him !' The horrible suggestion at once took possession of the whole party. They flung themselves on the new-comer, and a tragedy would certainly have followed had not some students in another room heard the victim's cries of terror. They, of course, rushed in, and made a forcible rescue. The affair was hushed up, and the club dissolved; but some of those who took part in the episode, which in its weird horror reminds one of the situations of Théophile Gautier, are now respected members of the profession, and will remember the occurrence.

The word 'assassin' is said to be a corruption of 'hashish,' and to have originated from the use made of the drug by a sect of religious fanatics in Persia to remove their enemies. They induced heavenly visions, which they assured their followers were real and the reward of assassination.

exposes its consumer to exaggerated susceptibility to suggestion. But there is this important difference. In hashish intoxication the suggestion is simply a natural sensory expression, received *spontaneously*, and greatly exaggerated. The hashish-taker sees a small sheet of water, and in his drug-induced dreams it becomes a magnificent river, a vast lake, or boundless ocean. He hears an Italian organ beneath his windows, and imagines himself listening to the orchestra at Bayreuth.

Dr. Barwise writes (*op. cit.*, p. 10) that, when experimenting with the drug on himself, he imagined the slight noise made by someone turning over the pages of a book to be a thunderstorm. Dr. Von Schrenk-Notzing has written an exhaustive treatise on hashish, and he finds that some persons while under its influence are as susceptible to verbal suggestion as if they were hypnotized. One of the men experimented on was a medical student, who not only obeyed all the suggestions made to him while under the influence of the drug, but also carried out suggestions made the next day (post-narcotic suggestions), and that without having any recollection of the order. For example, he was told to return to Von Schrenk-Notzing's house the following day, and to ask him for three cigarettes. This he did, and in the same awkward and shamefaced manner as often characterizes compliance with post-hypnotic suggestions ('Die Bedeutung narcotischer Mittel für den Hypnotismus,' p. 67).

In alcoholic and other forms of intoxication there is commonly an exaggerated automatic action, as seen in gesture, speech, and general demeanour, with corresponding inhibition of the higher and controlling centres, and increased readiness to act upon suggestion, whether it be self-supplied by the senses, or from without, by the bystanders. It is known that epileptics are extremely susceptible to suggestion, and any action suggested to one immediately after an attack would probably be executed automatically, without volition, and without subsequent recollection of its performance. This point is noticed by Sir W. Gowers,

and is interesting, as these subjects are peculiarly susceptible to hypnotism, perhaps because their cerebral centres are abnormally easy to dissociate and throw out of gear.* Increased suggestibility is the most prominent characteristic of the curious Malayan disease, latah.

With our present knowledge, it seems impossible to explain certain phenomena connected with advanced hypnosis. Some of these, which have often been attributed to clairvoyance, are undoubtedly the result of exaggerated perception and sensory hyperæsthesia. The subject will, under the stimulation of suggestion, read figures or letters at an amazing distance, will distinguish persons by a sense of touch too delicate to exist when the other faculties are at work, will feel the apparently imperceptible currents of air set in motion by 'magnetic' passes, and will comprehend and act upon hints and whispers which are inaudible to the ordinary listener. *Why* should the hypnotized subject be deaf to all sounds except the voice of the operator, and hear and obey that voice, though it be but the faintest whisper, and the surrounding sounds a perfect babel? The waking of a tired mother at the feeblest cry of her infant, though loud noises are unnoticed by her, and that of Nelson's signal-lieutenant at the word 'Signal,' though the roaring of the cannon had failed to arouse him, may afford an analogy, if not an explanation.

A peculiar species of phenomena is that in which a letter, or word, or object is eliminated from the consciousness of the patient. For instance, A B is told that

* According to Richet (*op. cit.*), the normal sleep of young children is almost somnambulic, and in support of this theory he instances the case of his little boy, aged five, who remains profoundly asleep when his father goes in at night to caress him, but who murmurs a welcome and returns the embrace. The next morning the child is unconscious of what has passed. It must be the experience of all observers that not only in such a matter, but in other everyday occurrences, a child is frequently in a condition resembling hypnosis, and this perhaps explains the fact that children are such satisfactory subjects for hypnotic treatment. The balance of the faculties has not yet been attained, and thus readjustment is easily effected.

on awaking he is to write certain words, say 'Alexandra Palace,' without the letter *a*. He will do this, and in so rapid and business-like a manner that the observer (who had better try to do the like) must be convinced of the genuineness of the experiment. Or he is forbidden to use the pronoun *I*, when he will be at extraordinary pains to avoid the word, and will not once be betrayed into employing it, though, as in the case reported by Max Dessoir, he may use its equivalent in some foreign language. The subject may be wide awake and perfectly reasonable in all other respects, but this *idée fixe* is firmly implanted in his mind, though he is absolutely unaware of its presence. If shown his copy in which the letter *a* or the pronoun *I* is missing, he will see nothing wrong about it, and the delusion remains until he is told to return to his usual state, when the absurdity of the thing will be at once apparent, and he will perhaps deny having written the incorrect words or sentences.

Several varieties of aphasia may be functionally induced by suggestion. The subject may be rendered incapable of uttering a sound (complete motor aphasia), or can be made to reply to every question by a meaningless formula, as in some of the pathological cases cited by Trousseau and by Gowers. He may be conscious or unconscious of the absurdity, just as in the pathological entity, and the condition may be modified in various directions. He may, for instance, be unable to pronounce the letter *e*, but able to write it, or *vice versa*. We know that aphasia may occur from functional causes, as from a strong emotion, when one is rendered speechless by terror, indignation, or overwhelming joy or surprise;* and the induced aphasia

* Dr. Ireland (*op. cit.*, p. 273) cites a case of sudden *gift* of speech under the influence of exciting emotion. A well-known merchant in London had a son about eight years of age who was perfectly dumb, so that all hope of his ever speaking had long been abandoned. The boy was intelligent, and had no other infirmity. During a water-party on the Thames the father fell overboard, and the hitherto dumb boy cried out: 'Oh, save him, save him!' From that moment he spoke nearly as well as his brothers, and afterwards became an active partner in his father's business.

of hypnotism seems to resemble this variety rather than that which sometimes occurs in the course of typhoid fever and from reflex disturbances. The subject is well worth the attention of physiologists, and its study may throw light on some morbid conditions connected with speech. The differentiation is very much finer than anything of this nature to be seen in disease, and requires correspondingly fine analysis. Sir W. Gowers remarks on the deficiency of facts and the redundancy of theories connected with this subject. Hypnotic experiments may help to increase the former and prove or disprove the latter.*

Violent emotion may cause other effects than transient loss of speech. Charcot† gives the case of an intelligent man who, after a violent paroxysm of rage, lost the memory of visual impressions. Though he could see objects, they all appeared strange to him, and he could not recognize his friends, nor even his own face in the glass. Injury to certain parts of the brain, especially the lower parietal lobe, may induce this ' psychical ' or ' mind ' blindness, and this condition can be exactly simulated by suggesting it to a sufficiently sensitive hypnotized subject. The association between the visual centre and the higher intellectual centres in which *memory* resides is inhibited in both cases.‡

That suggestion acts by partially or wholly inhibiting the perceptive centres seems demonstrable; but how it

* By hypnotic suggestion reading may be rendered impossible (alexia). The subject may also be made incapable of writing (agraphia), and can even be prevented from expressing himself by signs (amimia). Sewing, drawing, and indeed every action, may be tabooed by the same means. (See ' Der Hypnotismus,' by Dr. A. Moll, p. 92, Berlin, 1889.)

† Quoted in Landois and Stirling's ' Physiology.'

‡ Partial or complete loss or impairment of all the special senses may be induced in a similar way by suggestion—*e.g.*, the subject may be rendered unable to perceive the odour of violets, while noticing all other scents, or not to see red, while other colours remain distinct. The hypothesis that certain cells of the cortical perceptive centres are differentiated in the process of evolution to react to the special stimulus of certain sounds, odours, or colours, and that these are inhibited, is a tempting one.

does this cannot at present be explained. There is, of course, great scope for self-deception in hypnotic experiments; but if subjects of proved integrity are chosen (hysterical women and young boys are not so trustworthy as intelligent artisans), and if they are kept in ignorance of the phenomena which the operator desires to obtain, simulation need hardly be feared. Negative hallucination, as described later on, is a complex condition which I cannot explain, as some would do, by calling it mere clever acting. Sometimes, indeed, I suspect *unconscious* simulation on the part of the patient, as in the case of E. H——, who, when told not to see Dr. F——, carefully avoided looking in his direction, and refused to answer when he spoke to her, except once, when she looked puzzled, and answered him while looking towards me. She assured me that Dr. F—— was not in the room, but had been called away to see a patient; this I had suggested to her in the hypnotic sleep. On being told by me to see Dr. F——, she immediately looked at him, and expressed surprise at his sudden return. But in most cases the blotting out is complete, and the subject may even be pinched or pricked by the person designated as invisible without feeling anything, and the invisibility may be extended to any article which he (the subject) takes in his hand.

The induction by suggestion alone of pseudo-paralysis in a limb is a curious phenomenon. I can say to E. F——, whom I have frequently put into a state of advanced somnambulism, ' You cannot move that arm or that leg,' and so evoke the idea of powerlessness that for a few minutes the limb remains motionless; then, with a sensation as of ' pins and needles,' power comes back to it, and she can move it freely. Max Dessoir describes how he influenced a postman whom he could not hypnotize in any usual way. He told him to make the movements required in stamping letters, and, when he had done this for some minutes, cried in an authoritative tone, ' Now you cannot stop doing that !' The idea was fixed in the

man's mind, and, in fact, he could not leave off. During his performance of an act that with him had become automatic, the higher centres, being inactive, were easily inhibited, and the hypnotic condition was then induced by suggestion. One may call this hypnotism by surprise, and it corresponds to Preyer's cataplexy. I had once a somewhat similar experience: A lady came with a patient, her sister, and expressed great regret that neither I nor anyone else could hypnotize her, as she had often been tried with a view to cure her neuralgia. She sat down near me, and while hypnotizing the sister, who was an old patient and easily sent into the third stage (Liébeault) by passes, I kept my eye on her. I noticed that she was quite absorbed in watching the operation, so at the moment I finished hypnotizing the patient I put out my hand, and, placing it over the sister's eyes, told her authoritatively that she was also hypnotized. The effect was immediate and striking, for after twenty minutes' rest I awoke her, and she found her neuralgia gone. The auto-suggestion of insusceptibility being removed, I had no difficulty in hypnotizing her on subsequent occasions. Thus an indirect method succeeded where I believe any number of direct attempts would have failed, for, as Forel says, the idea of insusceptibility, especially if strengthened by failures, is the most potent bar to success. I have frequently seen Dr. Arthur hypnotize his patients by telling them to listen to his watch ticking, and the sound will send them to sleep. I sometimes use this method in persons whose sight is weak or defective.

The case of Mrs. M——, a hospital nurse, is typical and interesting. She was first hypnotized by me in October, 1888, and since then I have hypnotized her frequently —perhaps two hundred times—generally to demonstrate various phenomena to medical friends. She is a person of little education, but has good natural ability, and is a clever nurse. I find her a somnambulist of an advanced type, with no memory on waking of what has occurred during the hypnotic sleep. As she was a good and

willing subject, I used to get her to obey my suggestions post-hypnotically; but on one occasion she took offence at some remark of a bystander, and told me she would never again do anything of the kind. Henceforth her reply was always *No* when I asked her to do anything on waking, and such suggestions were never carried out. After some months, however, I persuaded her to withdraw her opposition, and she now again goes through the little tests which I propose. I find, as Binet and Féré have observed in some of their cases, that this subject is quite unconscious of obeying any initiative except her own, and invariably finds some reason for her conduct. For instance, she is told to move a lamp from one table to another, and if asked why she has done so, she replies that she thought it would look better in another place, or give some such plausible excuse. No one could be more surprised than she is when told that she has simply obeyed an order. And as in dreams no commands given seem ridiculous, and hardly any are deemed impossible to fulfil, so it is with such ' advanced ' hypnotic subjects. Nevertheless, Mrs. M——'s resistance to suggestion seems to show that some personal control is maintained, and her intelligent replies to questions demanding calculation and reasoning, such as, ' What is the best route to the city ? How much time is required to get there ?' imply some working of the higher faculties.

Dr. F——, a foreign physician of much experience, attempted in my presence to hypnotize this subject. Without being aware of it, she was protected by my having frequently told her, while she was in the hypnotic state, that she must allow no one except myself to send her to sleep. Dr. F——'s attempt to do so made her uncomfortable, but not at all sleepy, until I told her that she was to be influenced by him. My embargo thus removed, a few minutes sufficed to induce her usual state of profound somnambulism, in which she was anæsthetic and insensible to her surroundings. I now spoke to her, and she gave no reply, until Dr. F——

told her to do so, when she immediately answered my questions.

There is another curious phenomenon obtainable with the above-mentioned subject, as well as with many other somnambulists—a compulsory automatic action brought about and maintained by suggestion *without* hypnotism.* Thus, I set Mrs. M—— to perform the action of 'twiddling her thumbs,' and tell her that she is unable to discontinue it. Though she laughs and protests, and is apparently in full possession of her faculties, she cannot leave off the movement until I give her permission to do so.

Dr. Ireland, writing on the double brain (*op. cit.*), quotes largely from Dr. Edgar Bérillon's book.† This author certainly has the courage of his convictions, for, after giving many examples of the double-brain action, he records experiments which satisfy him that through the agency of hypnotism we can induce this double action. For instance, he will speak into the right ear of a subject in a profound state of hypnosis, and describe to her an amusing scene at a theatre; then into the other ear he will pour some tragic tale. The right side of the face will express pleasurable feelings, whereas the left side will, at the same time, wear a look of grief or terror. Dr. Bérillon defies anyone in an ordinary state of health, or even in hysteria, thus to produce the simultaneous expression of a double set of emotions. He makes the following inductions: '(1) That hypnotism can suppress the psychical motor and sensory activity of one hemisphere of the brain. (2) That it can give to each hemisphere a different degree of activity. (3) That, the two hemispheres having an equal degree of activity, we can create for them at the same time manifestations varying in their seat, their nature, and their character.'

* Moll (*op. cit.*, pp. 192, 193) is of opinion that such odedience generally implies a slight degree of hypnosis, induced by the mere command in a susceptible subject.

† 'Hypnotisme Experimental, la Dualité Cérébrale, et l'Indépendence Fonctionnel des deux Hémisphères Cérébraux,' Paris, 1884.

That a transference of functional activity from one side of the brain to the other may sometimes be effected by hypnotism seems to be shown by the case of Louis V—— (described on p. 99). This subject was easily hypnotized, and in the hypnotic state would lose the right hemiplegia from which he was suffering, and walk quite naturally. When he was hypnotized, both his eyes were shut, as in natural sleep; and if either of them was forcibly opened, the corresponding side of his body became cataleptic, while if both were opened the whole body took on this condition. If the right eye was opened while he was talking or reciting in the hypnotic state, he not only became cataleptic on the right side, but also aphasic, and the physician in attendance, Dr. Jules Voisin, came to the conclusion that this action produced an inhibitory effect on the left hemisphere, and consequently and inclusively on the normal centre of speech. When the eye was again closed, he took up his speaking or reciting where he had left off. The opening of his left eye in his ' first state ' had no effect on his speech; but in his ' second state,' during which his words and mode of expression were extremely childish, opening the left eye stopped speech, whereas opening the right eye produced no effect. This, according to Voisin's theory, supported to a certain extent by Burot and Bourru, showed that the speech centre had shifted sides. In his ' first state ' Louis V—— used chiefly the left hemisphere of his brain, and in his ' second state ' the right hemisphere, which, being less educated than the other, accounted for the imperfect character of the speech produced during its preponderance.

Dr. W. Ireland,* in his interesting volume of essays dealing with abnormal mental conditions, gives some curious examples of double consciousness occurring in the course of disease and from poisoning. He refers to hashish-eaters being sometimes conscious of a double individuality, and quotes the well-known case of a drunken porter who, when sober, used entirely to forget where he

* ' The Blot on the Brain,' Edinburgh, 1885.

had left his parcels, and remembered it only when he was again intoxicated—that is, when the brain was again in the same specific state which it had been in when he committed the action. Dr. Ireland also mentions the sensation of double personality sometimes experienced by a person suffering from severe illness, who has appeared to himself as two different individuals, one of whom suffered, while the other looked on and pitied him.

Draper, in his work on physiology, refers to this point, and remarks that one never experiences three consecutive trains of thought, for the very good reason that our brains possess only two hemispheres. He considers that the two sides may sometimes act independently, and even inharmoniously, and thinks that double cerebration may be thus explained. Thus we may follow out a train of thought while giving a fair amount of attention to an address or sermon, or we may even be able, like Mr. Barkworth, of the Society for Psychical Research, to carry on an ordinary conversation, while adding up a double column of figures. Of course the theory of a double action of the cerebral hemispheres need not be invoked to explain such everyday occurrences as being able to play the violin or piano whilst carrying on a conversation. Practised musicians can, we know, play difficult music while engaged in conversation, just as artists are able to talk to their sitters while painting them. But we need not invoke the theory of dual brain action to explain this, any more than we require it to explain how it is a sempstress can ply her needle and sing the while. In these cases continued practice has made the special movements of eye and hand automatic, and there is no question of employing the functions of higher cerebration. When the artist comes to a difficult passage or piece of work, he is seen to become silent and to devote all his faculties to its elaboration. The associated group of centres require the control and leadership of the highest nervous arrangements.

The brain is, of course, a double organ, anatomically

and physiologically; and though in normal life the two hemispheres are so functionally associated that they act as one, such cases as those I have cited seem to show what most observers are agreed in concluding, that under certain conditions the partnership may be dissolved, and one side may act independently of the other. In some cases of insanity the patient has been observed to ask questions and reply to them, as in two different capacities, and Ireland supposes that in such instances the two hemispheres are acting alternately. He suggests that the existence of such conditions may prove a key to the explanation of many cases of 'spirit-possession' and hallucination.

The left hemisphere is much more used than the right, and in general is proportionately more developed, though in left-handed persons the reverse is said to be the case. But although we may ordinarily use only one half of our brain for certain actions, we can sometimes, in case of necessity, educate the neglected half to act when the other is injured. We may thus explain those curious instances in which, after an illness, previous education is forgotten, and the patient has laboriously to learn everything over again—to re-educate his brain, or rather to educate that portion of it which hitherto has been comparatively unused. Hypnotic suggestion, circumspectly used, might doubtless afford valuable assistance in such brain education.

The dissociation of the two sides of the brain, and the transference of preponderating influence from one to the other, certainly seems to afford a plausible explanation of many of the phenomena of advanced hypnosis. But it is not so easy to attribute to this dissociation and transference the therapeutic and other effects observable in the minor degrees of hypnotic influence with which the practitioners of the Nancy school are satisfied. Physiological theories change as knowledge increases, and when they are proved to be erroneous they are apt to drag down in their fall the practice which has been founded upon

them. Therefore, while avoiding mere empiricism, it is safer not to depend too much on any as yet unverified theory of hypnotic suggestion. Within the next few years a flood of light will probably be thrown upon this subject, if, as we hope, the formation of a medical society for the study of suggestive therapeutics leads to the interchanging of ideas and experiences among practical men.

CHAPTER VII

Reality of Hypnotic Phenomena.—Simulation Tests.—Practical Directions for Medical Hypnotism.—Excessive Nervous Tension.—Warmth by Suggestion.—Vital Reaction.—Absence of Personal Element in the Nancy Treatment.—Method of Fascination.—Some Diseased Conditions benefited by Hypnotism.—Medical Education essential for its Successful Practice.—Racial Susceptibility.—Wetterstrand's Methods.—Table of Diseases treated by the Author.—Farez and *Suggestion Somnique*.—Mental Diseases and Insanity as affected by Hypnotism.—Voisin's Success in Lunacy.—Researches of Italian Alienists and Neurologists.—Forel's Opinion of the Treatment.—Treatment of Epilepsy by Hypnotism and by Prolonged Hypnosis.—Hypnotism in Organic Disease.—Treatment of Stammering, Rheumatism, Neuralgia, Seasickness, Neurasthenia, Asthma, Chronic Alcoholism.—Statistics of Results and Remarks.—Formation of Medical Society for the Study of Hypnotism in England.—Aids to Hypnotism.

To the believer in the scientific certainty and therapeutic value of hypnotic suggestion, it is somewhat trying to be told, as he sometimes is, that the whole thing rests upon a foundation of error or misrepresentation. Sceptics, we find, divide themselves naturally into two classes: those who entirely deny the existence of the hypnotic state, or affirm that its production is so rare as to be hardly worth taking into account; and those who, while they acknowledge the reality of the psychical condition, refuse to believe in its utility as a remedial agent.

The former are a diminishing quantity, and must soon succumb under the accumulating evidence adduced by such scientific observers as Charcot, Richet, Hack-Tuke, Moll, Heidenhain, Krafft-Ebing, Preyer, Beaunis, Tamburini, Lombroso, Bramwell, Myers, McDougall, Mitchell, etc.

The attitude of the latter class is comprehensible and, indeed, natural. It is right that the guardians of the public health should exercise a healthy scepticism and demand convincing evidence before approving a treatment of this kind, or admitting it into their practice.

The work of such practical observers and clinicians as Bernheim and Liébeault of Nancy; Voisin, Bérillon, Farez, Dumontpallier of Paris; Von Schrenk-Notzing of Munich; Van Renterghem and Van Eeden of Amsterdam; Albert Moll of Berlin; Wetterstrand of Stockholm; Cruise of Dublin; Bramwell, Wingfield, and Woods of London; George Kerr and Murray Lyon of Edinburgh; Betts Taplin of Liverpool; Bryan of Leicester, and many others, supplies the necessary therapeutic testimony, and we see hypnotic suggestion take its place in the armamentarium of the medical practitioner in spite of the difficulties thrown in its way by charlatanism and impostors past and present.

The *argumentum ad hominem* is, as Richet* tells us, undoubtedly the best to use; and as medical men are often excellent subjects, it has sometimes been my good fortune to convince a friend, and at the same time benefit a patient, by putting a member of our profession into one or other stage of the hypnotic state.

That simulation and imposture are frequently practised at public 'entertainments' I am not concerned to deny, though it is easier to procure a genuinely susceptible subject than to take the trouble of training a confederate. Public performers are generally careful to have with them some subjects whom they have frequently hypnotized, so as to be prepared for contingencies.

One must admit that the desire to please and to appear interesting will, especially among hospital patients, lead to a good deal of simulation, intentional or unintentional. But in private practice, and among intelligent patients, simulation is a bugbear of which we need take little account. With experience, too, comes the ability to

* 'L'Homme et l'Intelligence.'

detect deception, and the practised hypnotist is on the watch for it,* and is very acute in perceiving its slightest tokens. And, in fact, the patient is, as a rule, *more* rather than *less* influenced than he supposes. He will frequently say that he has in no way lost control over his thoughts and actions, and will be surprised to find that he cannot open his eyes, or that his arm has become immovable at the operator's bidding. The very way in which he tries to open his eyes is characteristic of an altered condition. Instead of using the levator palpebrarum, he wrinkles his brows and energetically employs the frontalis. If at last he succeeds, it is only after great exertion, and the eyelid opens in a peculiarly slow and heavy manner. In the same way, if, after being a little more influenced, he is told that he cannot bend or otherwise move his arm, he will make violent efforts to do so with the wrong set of muscles, and will perhaps at last, with difficulty, effect a partial and jerky movement in the desired direction.

It is but fair to ask one's self, Why should a patient make pretence about hypnotism any more than about other medical procedures? If we give a prescription to remove neuralgia or rheumatic pains, we do not accuse our patient of simulation when he returns and tells us that the *mistura ferri* or *sodii salicylas* has relieved or cured him, but rather attribute this good result to our remedy, and congratulate ourselves on its success. The therapeutic test is a perfectly fair and correct one, and as it is neither necessary nor desirable to produce the physiological action of drugs when we give them as curative agents, so it is needless to evoke or expect the phenomena of *le grand hypnotisme* in cases where we use suggestion as a remedy. A knowledge of the physiological action of a

* Charcot has devised an ingenious instrument, by means of which the tracings given by the involuntary movements of the arm in simulated catalepsy can be compared with the very regular and even tracing made on a revolving cylinder when the subject is in the genuine hypnotic state. This contrivance may prove useful in the detection of fraud. (*Vide* 'Diseases of the Nervous System,' vol. iii.)

drug is necessary, as without such knowledge we should be using it empirically; and a familiarity with the phenomena of advanced hypnotism furnishes us with a key to the action of suggestion, as in the phenomena of poisons we find one to the action of drugs.

The method I usually adopt to produce the hypnotic state is that practised by Liébeault, and is undoubtedly the easiest and most rapid. The treatment is psychical, and attention to detail is absolutely necessary to success. The existence in the patient of any opposing idea, as of fear, or of a spirit of ridicule, or of decided hostility, or a consciousness of bodily discomfort, will render futile all attempts to hypnotize him—at least, at the first trial.* His mind must be at rest, his position comfortable, and the environment should be such as would favour the advent of ordinary sleep. It is sometimes helpful to hypnotize one or two patients in the presence of a newcomer, so as to arouse his imitative faculty and dissipate any nervous feeling he may have. And some friend should always be at hand during the entire operation.

I suppose most medical men have noticed a characteristic symptom of many neurotic patients—their inability to relax their muscles. If you hold up such a person's arm, and tell him to let it fall dead when you release it,

* Not necessarily so. One of my best subjects was Dr. C——, a prosperous G.P., J.P., and Mayor of his town. I was asked to meet him at a friend's house and tell him about hypnotism. I soon found that he was very sceptical, and that the party were in league to draw me out and laugh at me. After a little while I told Dr. C—— that I was sure he would prove a good hypnotic subject, and he consented to let me try. He passed into a state of somnambulism almost at once, and to prove this I applied various tests. Among others, I told him he had a sharp pain in his right knee, and could hardly walk. On awaking, he complained of his knee, and attributed the discomfort to having sat in a draught and getting rheumatism. After a few minutes I hypnotized him again, and suggested away the pain. The laugh was turned against Dr. C——, who no longer scoffs at the unknown.

Dr. Wingfield relates some similar experiences at Cambridge, as, for instance, when he got a rather conceited undergraduate to assert that only mentally defective people could be hypnotized, and then promptly threw him into a state of somnambulism. No doubt there is at the back of such persons' minds a feeling akin to fear that there is something in it.

you will find that it either remains suspended or is dropped with violence. This state of tension often explains the nervous exhaustion from which the patient suffers, for it means constant waste of nervous energy. The first thing to teach such a patient is to relax and until he learns this he will be difficult to hypnotize.*

The patient reclines on a couch or in an easy-chair, and I stand or sit beside him, and hold the first two fingers of one hand at a distance of about twelve inches from his eyes, at such an angle that his gaze shall be directed upwards in a strained manner. I direct him to look steadily at the tips of these fingers, and to make his mind as nearly blank as possible. After he has stared fixedly for about half a minute, his expression will undergo a change—a far-away look coming into his face. His pupils will contract and dilate several times, and his eyelids will twitch spasmodically. These signs indicate a commencing induction of the desired psychical condition. If the eyelids do not close spontaneously, I shut them gently, and the progress of sleep is generally helped by verbal suggestions, such as: 'Your eyes are becoming heavy; they are getting more and more heavy; my fingers seem indistinct to you' (this when the pupils are observed to dilate or contract); 'a numbness is stealing over your limbs; you will be fast asleep in a few minutes; now sleep.' It is sometimes an assistance to lay one's hand gently but firmly on the forehead.

In ordinary cases, the operator will find that the hypnotic condition has by this method been induced in from one to three minutes, and he may now ascertain what degree has been arrived at. This depends chiefly, if not entirely, on the temperament of the subject, and I consider it impossible to foretell with any certainty what stage of hypnotism will be reached by any person who has never yet been hypnotized. I do not, as a rule, make

* Miss Anna Call, of Waltham, Boston, U.S.A., has developed this relaxation idea into a system of treatment, and her book on the subject, 'Power by Repose,' is well worth reading.

many suggestions at a first sitting, but I gently rub the epigastrium and suggest a feeling of warmth in that part of the body, a general sensation of comfort and well-being, and an agreeable awakening. I add that my suggestions will recur to his subconscious mind, and act curatively during his normal sleep. I find it greatly impresses the patient, and serves as a first rung of suggestion's ladder, to rub the skin over the parotid and submaxillary glands, and so stimulate the secretion of saliva. The salivary are the most easily stimulated of all glands; the mouth becomes full of saliva, which the patient has to swallow repeatedly to get rid of. The increased secretion of saliva is probably followed by similar action on the gastric glands, and even those of the intestines, and explains the improvement of appetite and digestion resulting from hypnotic treatment. After a few minutes I tell the patient that he has rested long enough, and that he can open his eyes and arouse himself. He generally obeys at once, and says that he feels refreshed and comfortable. I ask him what he remembers of his few minutes' rest, and he generally tells me that he has heard every word I said to him, and also any other sound that there may have been, but he adds that he felt a great disinclination to move or speak until he was told to open his eyes. He finds the feeling of warmth induced by suggestion, and by gentle friction of the abdomen, very marked, and this sensation will probably continue for several hours. He is perfectly awake and quite himself before he leaves the house.

The feeling of warmth is a characteristic and important symptom, and Liébeault was invariably confident of doing good to the patient in whom he could produce it, if the malady were a tractable one.* It is likened by some

* This response to suggestion of local warmth is an excellent test of vital force and reaction, and it varies with the health of the patient. For instance, it is slow to develop and slight in intensity in enfeebled subjects. As they improve in health and tone the reaction increases. It is a much better test than the fanciful and costly instruments devised by Dr. Joire of Lille and

subjects to a sudden flush, and by others to the application of a hot poultice. Magnetizers naturally attribute this sensation to the passage of the magnetic fluid from the operator to his patient, but it seems to arise from stimulation by suggestion of the vasomotor centres, and from a transmission to the part of increased nerve and blood supply. A sensation of cold can often be substituted by suggestion for one of warmth, as I have seen in cases of gastric ulcer and of congestive headache; in such a case the physiological process is perhaps reversed. Suggestion without contact would probably suffice to produce this local action; and there is no doubt that friction with a book or other small article has generally the same effect as hand-friction.

On a second visit, the patient will usually enter the hypnotic state more rapidly, and its degree will very likely be found intensified. Therapeutic suggestions may now be made, or, if it is desired, the extent of hypnotic influence may be tested. This is generally done by first raising the arm at an angle to the body, and telling the patient to keep it there. If the cataleptic state has been reached, it becomes stiff and rigid in that position, and will remain in it for an indefinite time, corresponding to the subject's muscular development. If the arm shows no tendency to drop, a rotary motion may be given to it, and the patient told to continue this movement. If the third degree is reached, he will do so until he is ordered to desist. The tests of somnambulism may now be applied. The first of these is to speak to the patient and get him

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others. They assert that the movements of a quill balanced on a point and fixed in a glass dome depend upon the 'exteriorilization of nerve force,' and measure the vitality of the experimenter holding his hand near it. My friend Sir W. Barrett, F.R.S., tells me there is nothing new in this device, and that the effect is produced by the heat of the hand. The approach of a hot-water bottle would, he thinks, give rise to a greater range of movement than that of the strongest man or profoundest thinker. Dr. Joire claims to have eliminated the action of heat in his experiments, but this is not borne out by investigators (*Annals of Psychical Science*, November and December, 1906). Dr. Joire calls his instrument a sthenometer.

to reply. Another person is then told to address him, and if the questions he may put fail to elicit any response, it will be evident that the subject is *en rapport* with the operator only, and other tests may be used, such as tickling the nostrils with a feather to demonstrate that anæsthesia exists, and prove the depth of somnambulism. Finally, if all these tests point to decided somnambulism, post-hypnotic suggestions may be made. The patient may, for instance, be told to sit on a certain chair, to open some book at a particular page, or to write a sentence leaving out a specified letter. Negative hallucinations, delusions of the senses, etc., can also be suggested. I need hardly insist that such tests and experiments are quite inadmissible without the previous consent of the patient and the presence of his friends.

The patients who attended Liébeault's clinique were desirous and eager for the treatment, and he and Professor Bernheim had the advantage of possessing their faith and co-operation. It is, I believe, essential to have the patient's confidence, and the time spent in acquiring this previous to commencing operations is well employed. Failure in obtaining the patient's goodwill may not only prevent success, but may even cause the process to produce an aggravation of the symptoms. I have had the opportunity of noticing this on several occasions, and now never attempt to hypnotize without having the free consent of the person most interested. Neglect of this precaution led to some trouble in one of my early cases. A physician asked me to hypnotize a patient for him, a young lady suffering from chorea. She expressed a dislike to the treatment, and only gave an unwilling consent to it being tried after a great deal of argument. She was susceptible to a certain extent, but her sleep was irregular in character and very disturbed. When she awoke, the choreic movements were decidedly worse. On each subsequent occasion a similar process had to be gone through, and no good result ever followed. When left alone she got well without treatment in a few weeks, and then took

her revenge on me and hypnotism by writing letters about it to the papers! In these she stated that she had struggled with might and main, and with partial success, to retain consciousness, as she disliked the process, and did not believe in its utility, thus showing that the very first conditions of success were wanting in her case. Of course, I refer to the Nancy method of hypnotizing by 'persuasion,' as it is well called. There is another method employed by many of the platform operators and by some medical men under special circumstances—hypnotism by fright or compulsion. The state thus induced is akin to that produced in animals and in man by sudden fright or shock. It resembles hypnosis, and may pass into it. Preyer calls it cataplexy. Charcot's cataleptic state, produced by the sound of a gong or by the flashing of a brilliant light, corresponds to this state, and resembles the condition of a person surprised by a train at a railway-crossing, or transfixed with terror by an appalling sight—*e.g.*, the head of Medusa in the shield of Perseus.*

I find a good method of testing susceptibility to hypnotism is the following: The patient is directed to stand with his back to me and his arms extended, so that his fingers lightly touch the chimneypiece. I tell him to stand easily and with relaxed muscles, to put his heels together, his chin in the air, and to close his eyes. He will then be in a state of rather unstable equilibrium, and it does not take much to shake him. I then make 'passes' down the back from the occiput to the sacrum, my fingers just touching him. If he is very susceptible, he will almost at once begin to sway backwards, and will fall unless supported. If less susceptible, it will only be when he is told to drop his hands to the side that he will sway or fall; whilst if he feels nothing and makes no movement, I know that I have a difficult subject to deal with.

* Livingstone has recorded his sensations when in the clutches of the lion which lacerated his arm and was very near killing him. He says he felt no pain and was conscious of no fear while his eyes were riveted on those of the enraged animal. In fact, the emotional centres were inhibited, and he was practically hypnotized.

This little experiment is very easily made, and it is interesting to note the number of persons among one's friends who respond to it—at least seven out of ten. Sometimes the body becomes cataleptic, and sometimes drowsiness is felt; at other times, though the swaying is very apparent, the subject says he feels nothing.

Hypnotism, as I have already said, is merely a psychical preparation or vehicle for suggestion, and this condition being induced, it remains for the treatment to be applied. The suggestions vary, of course, with the nature of the malady to be treated. If headache is the chief symptom, the head is gently rubbed, while the disappearance of the pain and its non-reappearance are suggested. If sciatica, the course of the sciatic nerve is rubbed, and the substitution of warmth for pain is suggested. If insomnia, the patient is told to feel sleepy at a certain time, and to sleep steadily through the night. If constipation, a motion is suggested at a specified hour—for instance, after breakfast. In treating rheumatic affections, the parts are well rubbed and the joints and muscles exercised by movements. In neurasthenia and spinal irritation, the spine is rubbed and kneaded. In cases of amenorrhœa, the advent of the period is suggested at the time when, by inquiry, it is found to be due.

In moral cases, such as dipsomania, a dislike of stimulants and a freedom from craving or discomfort is suggested, as also are self-control and a desire for cure. The training and tact of the physician find full scope in the application of suitable suggestions, and also in the recognition of the amenability of a case to this treatment.

The results are often more pronounced and more rapid than in most lines of treatment, and a patient may awake relieved or cured of a long-standing pain or loss of function; but it is well that neither patient nor physician should expect too much, and marvellous cures are apt to be short-lived. There should, however, be a steady improvement from day to day, and if, after a few trials, no change is observable, I generally give up the case as

being unsuited for the treatment. Liébeault allowed only a few minutes for each case, but in many instances it seems to me desirable to let the patient rest for twenty minutes or longer, for we may well suppose that during that period suggestions are working under a favourable condition of the nervous system.* The treatment should be repeated at intervals of not more than two or three days; otherwise incipient improvement may be checked by a fresh relapse.

I find improvement progressive, and cure permanent when once achieved. But in many patients there is a tendency to give up when a certain amount of progress has been made; and this tendency should be strenuously combated. In moral cases, it is absolutely necessary to have the patient under trustworthy observation, so as to guard against deception and relapse. I now refuse to treat such cases unless the friends are able to give proper supervision; and even after the cure appears complete, the patient, so I consider, should be told to report himself at regular intervals for at least a year, for repetition and reinforcement of the suggestion.

My practice is to make three or four attempts to hypnotize, and if absolutely no effect is produced I feel

* Professor Wood, of Philadelphia, writing to the *Lancet*, January 11, 1890, on hypnotic suggestion, which he had recently studied in Paris, and has introduced into his hospital practice, seems to consider that the hypnotic sleep alone is frequently sufficient to promote cure, and to think that Bernheim is wrong in attributing everything to 'suggestion.' I entirely agree with Dr. Wood that in certain cases of hysteria and nervous exhaustion and irritability the physiological rest enjoyed during hypnosis is a powerful and, perhaps, sufficient factor in the cure; but it is impossible, even in these cases, to eliminate curative suggestion, for where it is not expressed by the physician it is understood and supplied by auto-suggestion by the patient. Dr. Wood's remark that the atmosphere of the Nancy and Paris hospitals is 'heavy with faith' applies, fortunately, to all institutions where cure-work is carried on. In London, at present, we have not the advantage of this meteorological condition, but the results are sufficiently satisfactory in suitable cases. Dr. Bramwell relates how much more easy he found it to hypnotize his patients at Goole, where he carried on a general practice for many years, than afterwards in London, because of the greater simplicity and faith of the people there.

that the subject is not susceptible. In this respect I confess I lack the confidence and perseverance of Dr. Moll, who seems to think that everyone can be hypnotized, by one method or another, in course of time. He relates how he tried one patient forty times! Dr. Milne Bramwell reports cases in which he has succeeded in inducing somnambulism after the patient has proved absolutely insusceptible fifty, sixty, and even seventy times—an experience which speaks equally for the faith and pertinacity of patient and physician. I have occasionally, in special cases, made five or six attempts, but so far I have almost invariably found that if no effect is produced at the third sitting, it is useless making further efforts—at least, for some time to come. In such cases I console myself now with the dictum of a clever American woman doctor, who told me that some patients are on the spiritual, others on the mental, and others on the pill plane, and that it is useless trying to treat the third class with anything but crude drugs. It is quite probable that circumstances may change, and subsequent attempts be successful. I know one lady who has suffered intolerable pain from occipital neuralgia for six years, and who consulted me about two years ago with a view to trying hypnotism. I tried six or seven times to hypnotize her, but was unsuccessful. I then advised her to put herself under Dr. Auguste Voisin, of Paris. He endeavoured to hypnotize her on thirty-five occasions, but failed, though he employed chloroform as an auxiliary. On her return to England I again made some futile attempts, and then sent her to Dr. Milne Bramwell, who at that time lived at Goole. He and his partner tried about 150 times, and at length succeeded in inducing partial catalepsy and sensation of numbness in one arm. But the patient could always open the eyes, and the pain was little, if at all, relieved. She writes to me that she has now been operated upon about 210 times, and expresses her intention of continuing the treatment, as it seems to offer more chance of relief than anything else she has tried. The lady is remarkably

bright and intelligent, and one can only suppose that the intense and long-continued pain has made it impossible for her to attain the necessary abstraction of thought.*

Another patient, a hospital nurse, was sent to me in 1904 by a throat specialist for functional aphonia. The young lady had come all the way from New Zealand for treatment, and several specialists had tried various treatments without any result. She was anxious to be hypnotized, and there seemed nothing against success, yet our attempts were futile. She had to return home, so I advised her to stop at Sydney and consult Dr. Creed, whose success is remarkable, and to let me know the result. She wrote to me some months afterwards, telling me she continued much the same, and that, though

* Dr. Bramwell in his book expresses the opinion that I am wrong in being so easily discouraged. Prolonged experience, however, confirms me in my practice. I do not, of course, mean that I expect to get the full effect of hypnotic suggestion in three or four sittings in a difficult case, but only that I look for some effect. Vain repetition of attempts to hypnotize becomes most irksome to both doctor and patient, and the money question is apt to arise. The patient may object to paying fees without any result, and the doctor cannot afford to sacrifice his time and energy without even the satisfaction of assured ultimate success. So, except under special circumstances, I think it is better to either send intractable patients to a colleague, to see what he can do, or to tell them to try again later on.

One never can tell, as Forel says, what is at the back of the patient's mind. Very often it is some erroneous preconception which argument, time, or change of operator may remove; but as long as it persists it is useless to expect results.

I shall never forget my experience with two patients in my early and enthusiastic days. The first was a medical man with delusions of persecution, sent to me by the late Sir. J. Russell Reynolds. I spent an hour a day on that man for a month without the slightest result, and I now know that he was absolutely unhypnotizable. About the same time a lady asked me to try what I could do for her brother, who had disseminated spinal sclerosis. This patient was a retired officer, and he used to come to me with military punctuality daily, lie down on the couch with resignation, receive my ministrations with apparent acquiescence, and ask me at the end of twenty minutes if I were finished and he might go. He simply came to satisfy his relatives, and resolutely opposed my efforts.

Forel emphasizes the fact that much depends upon first impressions in hypnotic treatment, and compares this to warfare, in which the result of the campaign often turns on the first engagement. Fortunately we all find good results reward our efforts even in chronic cases when the apparent hypnotic effect is very slight, and both patient and doctor are therefore encouraged to persevere.

Dr. Creed had been most persevering, and had tried twelve times, the effect on her was absolutely nil. I tried to hypnotize her ten times before giving it up, and I am sure a hundred attempts would have seen us no nearer the goal.

Bramwell mentions one case in which he was successful in hypnotizing a patient after having failed to influence her in sixty-five previous attempts. The patience of both parties was rewarded by the lady being very soon cured by hypnotic suggestion of pruritus vulvæ, which had defied treatment for several years.*

One frequently finds the degree of hypnotic effect varies. For instance, I hypnotized Mr. R—— in November, 1888, and noticed that he fell into the fourth stage. He was suffering from chronic bronchitis, and was in a low, depressed state of vitality generally. Subsequently I could never induce more than the second degree, for as his health improved he became less susceptible.

As regards personal qualification, I should say that tact and confidence are the only requirements. Different patients require to be approached in different ways, and the somewhat imperious tone which is necessary in some cases would arouse fatal antagonism in others.

The personal equation is, we must admit, a very powerful factor in all medical practice, and it becomes, perhaps, more prominent in suggestive therapeutics. For instance, some years ago a small tradesman came to me for obstinate lumbago, and I put him under hypnotic treatment. He was a good subject, and improved so rapidly that I expected soon to have him quite well. Then suddenly he ceased to make progress, and, in fact, rather went back. Finally we sent him to Droitwich, and the brine baths there completed his cure.

On his return he came to report himself, and then told me why he had suddenly ceased to improve under my treatment. It appears he was an ardent teetotaler, and among the many high qualities with which his imagina-

* *British Medical Journal*, February 28, 1891.

tion endowed me was that of sharing his horror of alcohol. His ideal was shattered one day by my coming in to hypnotize him from a luncheon party, at which I had drunk a glass of sherry. My breath betrayed me; he felt I was a poor, weak sinner, weaker than himself, and my suggestions never again had their former power over him.

The education and training of a medical man naturally tend to the development of the necessary qualities, and from my experience I believe that any medical man can, with a little practice, succeed in hypnotizing the majority of patients. Anyone can hypnotize some people, and there are others whom practically no one can influence. Between these extremes lies a third and comparatively small class, with whom it requires experience and practice to succeed, and it is the management of these cases which requires most time and patience. Doctors who have known nothing of hypnotism, except that they have seen me hypnotize two or three patients, have frequently gone home and at once been able to hypnotize their wives, children, and servants, and have only been stopped in their run of success by meeting a case altogether insusceptible or requiring very careful management. Bernheim, in his hospital clinique, claims over 90 per cent. of successes, and four-fifths of the patients fall into profound sleep or somnambulism, whereas in his private practice this ratio is altered in a remarkable degree, for though nearly the same percentage are influenced, only one-fifth or one-sixth fall into profound sleep without recollection on waking. The French seem slightly more susceptible than other nationalities, but Forel at Zurich, Ladame at Geneva, Von Shrenk-Notzing at Munich, Moll at Berlin, Van Eeden and Van Renterghem at Amsterdam, Wetterstrand at Stockholm, Tokarsky at Moscow, Hamilton Osgood in Boston, U.S.A., Creed at Sydney, N.S.W., and other practitioners all over the world, obtain nearly as good results.*

* Cory says ('Hypnotism and Mesmerism,' Boston, 1888) that he has never succeeded in hypnotizing a Chinese, though he has

Similar results come from far-off Brazil, where Dr. Domingos Yaguaribe has established (in 1901) at San Paulo a flourishing clinique, after a course of study at the Institut Psycho-physiologique under Dr. Bérillon. He has sent me photographs of his hospital and dispensary, which point to rare success in such a short period. He gives a résumé of the results of his first two years' practice, and these include 8,247 consultations. Among his principal successes are: Alcoholism 269 cases, neurasthenia 30, chronic diarrhœa 22, dysmenorrhœa 29, stammering 7, incontinence of urine 22, hysteria 95, neuralgias and headaches 469, rheumatism 26, deafness 12, various paralyses 52, chronic ulcers 5, hysterical blindness 2, dumbness 8, paralysis of speech 5. Dr. Yaguaribe finds his patients are easily hypnotized generally at the first attempt, and only about 5 per cent. prove insusceptible.

Perhaps the most successful hypnotic clinique was that of Dr. Wetterstrand of Stockholm.* Dr. Forel of Zurich, who has visited Stockholm, has described to me his method of procedure, and has published an account of what he saw in a recent work.†

His two large reception-rooms are luxuriously furnished, and in them are a number of comfortable arm-chairs and sofas. From nine till one daily patients crowd in, and each one in turn is carefully examined by Dr. Wetterstrand.

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experimented on several. The Orientals I have treated have mostly been good subjects.

Dr. C. W. Branch has experimented on 100 West Indian negroes and negresses of different ages, and found 87 per cent. were hypnotized with facility. He thinks the black races are more susceptible than the white (*Journal of Tropical Medicine*, April 2, 1906).

Esdaile, when he left India, took up his residence in Perthshire, and in his retirement continued to make experiments in hypnotism as a hobby. But he soon found that the canny Scot was a much more difficult subject to tackle than the mild Hindoo ('Dictionary of Universal Biography'). But Dr. Kerr of Edinburgh, Drs. MacLennan and McCluer of Glasgow, and other Scotch physicians who practise medical hypnotism, tell me their figures work out much the same as the English, French, Swedish, etc.

* I understand that his colleague, Dr. Bjerre, carries on the work with great success at Stockholm.

† 'Hypnotism,' etc. (English translation, 1906), p. 221.

Only such cases as he considers suited are selected for the treatment, and the others are sent away with ordinary prescriptions and directions. Those selected for hypnotic treatment are admitted into the reception-rooms and told to rest quietly and watch the procedure on the other patients. All around him the visitor sees other patients comfortably reclining in different stages of hypnotic sleep, and the whole atmosphere of the place is full of drowsy associations and suggestions of cure. When Dr. Wetterstrand comes to him he is already half asleep, and his mind is fully prepared to act upon the suggestions made to him. Ordinary suggestions, such as tend to deepen the sleep and produce feelings of general rest and comfort, are made aloud for everyone to hear, but the particular suggestions applicable to each individual case are given in a whisper by the doctor speaking into the patient's ear. It will be remarked that every step in the method tends to impress the imagination. The preliminary examination which the patient actually undergoes in the hope that his case will be found suitable for the treatment; the admission of the selected cases into the inner rooms, about which there is a certain air of somnolency and expectation; the vision of other persons in different stages of sleep—all excite the faculty of imitation and the desire to sleep to the greatest degree possible. After so much trouble and such careful selection the new-comer would indeed be ungrateful for opportunities and undeserving of cure if he did not enter into the spirit of the place and prove amenable to hypnotism and impressionable to suggestion. Small wonder is it, therefore, that Dr. Wetterstrand has treated over 3,000 patients with such success that he finds only 5 per cent. are uninfluenced by hypnotism.* Dr. Bérillon adopts a very

* In a hundred cases Wetterstrand finds the following proportions:

5·43 per cent. are uninfluenced.
7·24 per cent. feel drowsy.
52·49 per cent. are unable to open the eyes.
34·84 per cent. are somnambulic.

similar method in his clinique in Paris, and he rarely attempts to hypnotize a patient on his first visit or until he has been prepared for it by seeing other persons operated on. He, therefore, also generally succeeds in influencing his patients. Dr. Van Renterghem at Amsterdam pursues a somewhat similar course, and is equally successful. No physician adopting a psychical method of treatment can afford to ignore any legitimate means of influencing a patient's imagination. And the best way to attain this end is the assumption and maintenance of a firm and yet sympathetic demeanour. I am led more especially to thus enter into minutiæ by having observed the something like contempt some of the medical men I have met have expressed for what I may call the technique of suggestive treatment. I have seen a hospital physician, who believes in hypnotism, fail over and over again with his hospital patients because he has ignored the preliminary step of gaining their confidence and allaying their fears. To enter a ward surrounded with students, and to pick out a trembling woman and tell her, without the least preparation, that she is to be hypnotized and go to sleep, is to arouse all kinds of opposing emotions in her mind, and render hypnotism, at any rate by the Nancy method, impossible. The same woman, if approached gently, and shown other persons put to sleep and awakened, would probably prove an excellent subject, and might perhaps be cured by the treatment. Drs. Van Renterghem and Van Eeden always impress upon their patients that the more or less powerless condition to which hypnotism will for a short time reduce them is for a definite object, and, that object attained, there will be no more after-effect from hypnotism than from any other medical procedure; that there is no weakening of the will, and that the induction of hypnosis entirely depends upon their volition and co-operation, and cannot be achieved without them. The patient's attitude should somewhat resemble that of a passenger who gets into a cab in order to go to a certain place. Having secured a

decent conveyance and a respectable driver, he gives himself up to rest in the confident expectation of arriving safely at his destination. If, instead of sitting still and trusting to the coachman, he shouts out contradictory orders, and, in the fear of being taken out of his way, even pulls at the reins, it is probable that his journey will be somewhat prolonged. Many persons can never be hypnotized, because they lack the power of composing their minds and fixing their attention for two minutes at a time.

During 1890 I treated 118 patients by hypnotic suggestion, of whom fifty-nine were men, fifty were women, and nine were children between six and fourteen.

Of the men, I found ten were uninfluenced after repeated trials; and of the women, twelve were insusceptible. Only one of the children proved insusceptible. As regards degree of influence: seven became deeply somnambulic—three women, two men, and two children. Thirty-three exhibited the cataleptic phenomena. The remaining fifty-five patients were influenced to a degree short of catalepsy, and many of them experienced only a slight torpor or heaviness of the eyes. They all, however, felt the glow of reflex warmth, in response to suggestion, which is so important a characteristic of the hypnotic state.

Of the thirty-three patients on whom I tried the process in vain, five were absolutely insane and four were suffering from hypochondriasis almost amounting to insanity.

Of the remainder, some were scatter-brained and I could not get them to fix their attention, some were contradictious and would not remain passive, while some seemed to be over-anxious and too analytical. Two or three were so dull and heavy that they fell into natural sleep of a profound lethargic character, in which they were insusceptible to suggestion.

But in a few cases there seemed to be no reason whatever why the patient should not be a good subject, and it

is quite possible that on another occasion or under a different operator* they could be hypnotized.

The accompanying table will explain the ailments for which these ninety-five hypnotized patients were treated and the results of the treatment:

Number of Cases.	Disease.	Cured.	Benefited.	Unchanged.
8	Chronic alcoholism	4	1†	3‡
1	Tobacco habit	1	—	—
2	Morbid delusions	1	1	—
7	Hypochondriasis	1	3	3
4	Bad habits	2	2§	—
1	Melancholia	—	—	1
8	Neurasthenia	3	4	1
5	Insomnia	3	2	—
1	Morbid blushing	—	—	1
2	Megrim	1	1	—
9	Various chronic neuralgias	4	3	2
2	Epilepsy	—	1	1
4	Functional paralysis	2	1	1
1	Hystero-epilepsy	1	—	—
3	Writer's cramp	1	1	1
2	Stammering	—	2	—
2	General chorea	—	—	2
6	Dyspepsia of various kinds	4	2	—
4	Irregularities of the bowels	3	1	—
3	Nocturnal enuresis	2	—	1
8	Menstrual irregularities	5	3	—
3	Chronic rheumatism	2	1	—
2	Disseminated sclerosis	—	—	2
2	Locomotor ataxy	—	2	—
1	Cerebral tumour	—	—	1
2	Post-apoplectic paralysis	—	2	—
2	Infantile paralysis	—	2	—
95				

I have not included in the foregoing list a considerable number of cases where I have used hypnotism simply as a palliative in ordinary general practice and in the course

* I have sometimes succeeded in hypnotizing patients after other medical men of experience have failed, and, on the other hand, two or three persons whom I could not influence have been hypnotized by other operators. But, as a rule, I have found that the person who cannot be hypnotized by one physician is not likely to prove more susceptible with another, the conditions being similar in both cases.

† The attacks are rarer and less severe.

‡ There was a temporary improvement in all these cases, followed by relapse.

§ One relapsed after twelve months.

of acute disease—*e.g.*, in tickling laryngeal cough occurring in the course of pneumonia, colicky pain in typhoid, restlessness in endocarditis. Neither have I included cases in which I was only consulted once. Hypnotic treatment being comparatively novel, a number of persons come to the hypnotist more out of curiosity than for any wish to be cured, and others come with most exaggerated expectations. As an example of the latter class I may cite the case of an elderly gentleman who sent for me and asked me to hypnotize him in order that I might disperse an abscess, and so cheat the surgeon's knife. On examination I found a large abscess in the perinæum almost ripe for lancing. I succeeded, with some difficulty, in inducing a gentle and pleasant languor, in which I left him, after suggesting diminution of pain and a good night's sleep. These suggestions were fairly well realized, but the patient was sadly disappointed because the surgeon had to open the abscess on the following day. A medical man once called upon me with even greater expectations. He was on his way to his dentist to have a troublesome molar extracted, and he looked in to see if I could not anæsthetize by hypnotism, and thus render gas unnecessary. Needless to say, I did not succeed in gratifying him, and I am afraid he left me thinking very poorly of an agent which could not be evoked in its most advanced degree at will.* I have several times been asked to hypnotize girls, and induce them by suggestion to break off undesirable engagements. In one such case the evil was so apparent that I felt justified in acting the part of Provi-

* Some years ago the country was inundated with circulars from various institutions in America with high-sounding names. They offered to teach pupils by correspondence the art of hypnotism and suggestion, so that if tradesmen they would be enabled to sell their goods, and if clergymen to move their congregations by their eloquence. A good many people wrote to me on the subject, and some of the letters were very amusing. I had to reply that I did not think genius could be so easily manufactured, and that a five-dollar course would not make either a Whiteley or a Spurgeon. Some people's belief in the power of hypnotism seems unlimited, and this has been taken advantage of by some of our astute cousins.

dence, and suggested to the young lady that she would exercise judgment and caution, and be advised by her best friends. She shortly afterwards dismissed her lover, and I believe saved herself a life of misery.

Two or three ladies have called upon me and told me that their husbands were in the habit of drinking too much wine, and have asked me to treat them without their knowing anything about it. They expressed much disappointment when I had to tell them that the patient's wish to be cured was an essential preliminary in such cases.

In my own practice, during the years 1888-89, I found the following results:

Somnambulists	32
Profound sleepers	35
Light sleepers, or somnolent	88
Doubtful	9
Uninfluenced	42
Number of persons operated on	206*

All classes of society are represented in this table, which does not profess to be anything but a record of a somewhat limited personal experience. The English uneducated classes have an invincible distrust to novelty in treatment, and to this I attribute my almost complete want of success hitherto in public institutions. On most occasions, when I have talked to the patient and got him to come to my house, he has been easily hypnotized, and

* Over twenty years' further personal experience of hypnotism proves to me that these figures are fairly representative. In 1894-95 a committee was appointed by the Society for Psychical Research to make some experiments in thought-transference and other phenomena in the hypnotic state, and we advertised in a newspaper for subjects. Twenty-six youths were selected from a large number of applicants, and all these stated that they had never been hypnotized before. Eighteen proved hypnotizable, or 70 per cent., but of these only about one-third were influenced to the extent of somnambulism.

The young men were of the junior City clerk class, and we found the most intelligent were the best subjects.

I have no doubt but that, when hypnotism becomes a recognized treatment in hospitals, English experience will not differ widely from that of Nancy. One of the somnambulists is a doctor in a large general practice. My oldest patient was a gentleman of eighty-two, who fell into the second stage, and was cured in a few days of an attack of gouty sciatica, which had always previously lasted for weeks. He had been my patient for seven or eight years, so perhaps the therapeutic test is admissible here. My youngest patient was a child of five, who fell into profound sleep at once. Most of the somnambulists are women of neuropathic predisposition, but very few of them had ever had any attack of ordinary hysteria, and many of them are hard-working clerks or good household managers. Five of these, however, are boys of ordinary types apparently, and three are adult men of perhaps more than average ability and intelligence. The profound sleepers were generally epileptics or persons of phlegmatic temperament. I have never seen any untoward symptoms arise from medical hypnotism, nor can I conceive such a thing possible with ordinary care and gentleness.

I am quite certain that the patient has in no way felt subsequently influenced by the operation, except in the direction suggested by me and wished for by himself. The Nancy treatment is essentially impersonal, and it is the patient who hypnotizes himself under the suggestion and guidance of the physician, and the curative effect gained is the result of concentration and direction of the patient's own faculties and functions. The somnambulist might, I believe, be made, by frequent induction of hypnosis, to do foolish and even criminal acts, but no suggestion made to an ordinary subject will be executed unless it be in accordance with his wish. For instance, it would be useless to suggest to a stanch teetotaler, in any stage of hypnosis short of somnambulism, that he should drink brandy. The suggestion would defeat its end by arousing indignation and disgust. Such a suggestion,

opposed to his moral sense, made to a somnambulist, might be obeyed even the first time, but it would probably require frequent repetition to break down resistance and overcome his individuality.

The view is sometimes expressed by the public, and even by doctors, that as hypnotism is often so easily applied, and as the suggestions required are for the most part merely the contradiction of the morbid symptoms, therefore medical knowledge and training are not so much required in this branch of practice as in others. But this conception is entirely wrong, and no form of treatment calls for more careful medical education. The same may be said of nearly every kind of medical practice. For instance, it is easy for anyone to give relief to pain by a dose of opium, and to remove constipation by a purgative; but the wise patient prefers, when he is sick, to have his opiate or purge administered by a qualified doctor. And if this is the case with crude and material drugs, how much more should it be so when subtler remedies are required? I should certainly prefer taking a pill from a stranger to accepting his hypnotic suggestion!

If the method described for producing hypnosis fails, or loses its effect, I use a modification. Instead of the fingers the patient may be told to look at a bright metal disc or coin, or the skin of the forehead may be gently rubbed while the gaze is fixed on a distant object. Sometimes verbal suggestion tends to keep a patient awake instead of inducing sleep, and in many instances methods will have to be devised to meet different idiosyncrasies.

The method of fascination is, I consider, inapplicable and objectionable in ordinary medical practice, as it introduces too much personal element into the operation, and induces a state of complete automatism, in which the subject's *ego*, or personality, is entirely suppressed (Binet and Féré). It is practised by looking fixedly and pertinaciously into the subject's eyes at the distance of a few inches, and at the same time holding the hands. In a few minutes all expression goes out of the face, and the

subject sees nothing but the operator's eyes, which shine with intense brilliancy, and to which he is attracted as a needle to a magnet.

Auguste Voisin adopted this plan with insane patients, and sometimes succeeded when he had failed by all other methods. In such cases, of course, any means are permissible, as by hypnotism and suggestion he has succeeded in cutting short attacks of mania, and curing various intractable mental conditions.

There are objections to this method also from the operator's point of view. If the subject or patient is refractory and the operator tired, it may happen that the natural sequence of events is reversed, and the operator becomes hypnotized instead of the patient. Braid mentions several cases where this took place, and it has sometimes happened to Liébeault. On one of the few occasions on which I employed this method I nearly succumbed to the continued strain, and became conscious of a curious inhibitory influence stealing over the muscles around my mouth.* Fortunately, the patient just then

* The mouth is generally acknowledged to be the most expressive feature, and its movements are less under the control of the highest centres than those of other parts. The man who can face an enemy without flinching is often unable to control the twitching of his mouth under circumstances of emotion. It seems to be especially subject to inhibitory influence, and a drawing in the muscles about the mouth often precedes any other symptom in the coming on of hypnosis. A middle-aged physician consulted me for sleeplessness in 1889, and asked me to hypnotize him. I found him susceptible to about the second degree, and having made some suggestions, I left him alone for a quarter of an hour. On my return his eyes were open, and I spoke to him; but he made no reply, and pointed to his mouth. In a few minutes I understood what he meant, and proceeded to apply friction to it and told him to open it. He then said that he had not lost consciousness, and had opened his eyes at the expiration of the ten minutes I had told him to keep them closed; but he found he could not open his mouth, and there he had to lie speechless until I appeared and unlocked it. I had made no such suggestion, and can only explain the occurrence by supposing that I had unwittingly passed my fingers over his mouth in such a way as to suggest to him the idea that it was closed, which idea was carried into execution. The gentleman, who is an M.D. of London, was in a nervous state from want of sleep, and hypnotism would probably have done him good, but after this experience nothing would induce him to submit to the process again.

closed her eyes and passed into a profound sleep. The method by fascination is also extremely fatiguing, and where prolonged staring at an object is necessary, it is best to employ Luys's rotating mirror.

Dr. Paul Farez, of Paris, and several other physicians, find that they are frequently able to change natural sleep into hypnosis by making passes over the sleeper and gently telling him not to awake. I have often done this in old patients, but I have never succeeded with people who have resisted ordinary hypnotic processes. Dr. Bramwell has the same experience (*op. cit.*, p. 68).

Farez recommends the trial of what he calls *suggestion somnique* in many cases of insanity, neurasthenia, and in the correction of bad habits in children. Bérillon states that Hansen, the Danish hypnotist, used as a boy at school to amuse himself by making suggestions to his sleeping comrades, which they often automatically carried out the next day. Such procedures open up possibilities of a not altogether agreeable nature.*

Moll points out that the disagreeable effects sometimes seen in the first induction of hypnosis by other means than simple suggestion are due, not to the treatment, but to the patient's fears, and he says he has noticed similar symptoms accompanying the use of electrical appliances in nervous persons. I once hypnotized a hospital patient, who became slightly convulsed and then passed into a very hysterical state. She confessed that she looked upon the process with great fear, as being very 'uncanny.' Bramwell relates how in one of his cases hypnosis was ushered in by a slight unilateral convulsion, but this did not prevent the operation being followed by cure.†

As regards the hypnotizability of different types—taking Sir B. W. Richardson's classification of men into animal, intellectual, nervous, and their combinations—I

* *Revue de l'Hypnotisme*, November, 1905; *Journal of Mental Pathology*, New York, June, 1901.

† *British Medical Journal*, February 28, 1891.

should say that the persons of the animal type, large-framed muscular men, of somewhat slow intelligence, but placid and easy-going temperament, unless aroused, are the best subjects. I have had several such among my somnambulists. Persons of the emotional type are not so easy to hypnotize, but, once influenced, are probably the best subjects for psychical experiments. I have seen a great many somnambulists of this class, and I think that any danger which may accompany hypnotism is only likely to occur in such subjects. Men of the purely intellectual type are not easily hypnotized; their minds are too analytical, and they are, as a rule, too unwilling to allow their will to be in abeyance. Nevertheless, their confidence gained, they sometimes make good subjects, though I have never seen a somnambulist of this type. A considerable number of my patients have belonged to mixed types—animal-emotional, which Dr. Richardson rightly says is not a pleasing combination; animal-intellectual, which is an enviable balance of qualities; and emotional-intellectual, a class comprising a very large proportion of brain-workers, and to which most geniuses belong. I have found hypnotism easily applied and extremely beneficial in the treatment of the neuroses to which this last class is especially subject. I have rarely reduced them to a state of somnambulism; and, as their minds are generally receptive, such reduction is not necessary. Undoubtedly the most difficult subjects to influence are those of weak and fidgety character, who are unable to look one in the face or fix their attention, their eyes being an index to their minds. I need hardly say that such a person as a medical man, who offered me five pounds if I would hypnotize him then and there at a medical meeting, is not hypnotizable unless he is able to change his mental attitude.

That insusceptibility to hypnotism is not a sign of intelligence is well shown by the fact that imbeciles and idiots are not hypnotizable. One of the severest rebuffs I have ever encountered in my professional experience was

inflicted on me by a girl patient, an inmate of Paddington Infirmary. She was of an extremely low order of intelligence, and I suppose her bringing-up had made her very suspicious of everybody and everything. She was suffering from slight chorea, and it was thought that hypnotism would do her good. However, I exhausted the different methods in vain, and at length the patient flung my arm on one side, exclaiming, 'I'm not asleep, and ain't a-going to!' Dr. Hyslop, in an address he (1911) delivered before the Psycho-Medical Society, told us how, at a demonstration at Bethlehem Hospital, the operator closed the patient's eyes and said authoritatively, 'Now you cannot open them.' The patient promptly did so, however, and shouted, 'You're a damned liar!' These are the sort of things we are sometimes subjected to.

John Hunter, the great anatomist, has recorded (Hack-Tuke) how he nearly succumbed to the wiles of a mesmerist, and only kept himself awake by fixing his attention on his great toe, in which he was expecting an attack of gout.*

The physician in charge of a large workhouse infirmary once asked me to try hypnotism in his wards, and he picked out for me some suitable patients, as he thought. They were three broken-down hysterical women of low mental power, whose teeth chattered with fear when I looked at them. Of course such persons are most difficult to hypnotize, and one can only hope for success after repeated trials. I explained this to Dr. R——, and asked

* The peasant women of Brittany are said to send their children to sleep by making them look at a bright ball suspended over their cradles. This, the rocking of the cradle, and the monotonous song which nurses chant to infants, are distinctly hypnogenic agents acting by the monotonous and continuous stimulation of one sense. It is possible that children yield more quickly to such influences than adults, because their highest centres are as yet undeveloped, and therefore are more easily acted upon by inhibitory impulses proceeding from below. It is probable that the sleep of young children is of less mixed causation than that of adults; it is the result of inhibition almost entirely, the chemical products of cerebration which Preyer supposes exercise so soporific an influence being a *quantité négligeable*.

him to let me try on some more promising subjects, suggesting himself, his two assistants, and a ward nurse. They agreed, and he, one of the assistants, and the nurse, proved excellent subjects. In this relation I may say that people often give us quite impossible cases ' to try hypnotism on,' and when the inevitable failure results they are apt to say, ' Hypnotism has been tried, and has failed.' It is more satisfactory for the hypnotist to choose his cases himself than to allow a person ignorant of the treatment to do so.

A few years ago I was asked as a matter of charity to try the effect of hypnotism on a poor elderly lady afflicted with disseminated spinal sclerosis. She was brought to my house and laid on a couch every day, while for half an hour I practised the various hypnogenic methods upon her. But all my efforts were in vain, and after a few sittings I gave her up. About a year afterwards I heard through a friend that this patient was giving thanks to Providence for having saved her from my wiles, and she attributed her deliverance to having repeated prayers to herself during the process I adopted. She had consented to see me to oblige her friends, but had taken good care to render my efforts nugatory.

Even if hypnotizable, the patient may refuse to accept suggestion. For instance, Mr. B——, the son of a nobleman, was made to come to me to be treated for chronic alcoholism. He was of the ' weak-waster ' type, and was a surly and disagreeable patient. However, I induced Liébeault's third degree, and he became cataleptic. But he told his father that, though I might make him unable to move his arms when hypnotized, he was damned if I should prevent him drinking brandy when he wanted to. In such cases there is nothing to work upon, and I only saw him two or three times. He drifts from one inebriate retreat to another, and it is unfortunate for his family that alcohol is only such a slow poison. I now refuse to undertake such cases. A recent experience is that of Mrs. A——, wife of a good and hardworking army officer. A lady of

thirty, well born and educated, and nice-looking, with one child, she only came by compulsion, assured me that she hated the idea of treatment, looked upon teetotalism as low and allied to socialism, and that she often drank in order to annoy her husband, who was a 'bigoted teetotaler.' When disinclined to drink, she said, she achieved this amiable purpose by washing her mouth out with whisky. Conviction of sin in moral cases, and real desire for health in chronic invalidism, are, I am sure, the states of mind requisite to success. To obtain these the co-operation of a wise and good clergyman is often invaluable, and the two professions can often work hand in hand, as in the Emmanuel Church Movement at Boston, U.S.A.

The late Dr. Auguste Voisin's practice requires a few words of explanation. Many observers contend that, as hypnotic suggestion is essentially a psychical treatment, and dependent for its success on healthful stimulation of the brain centres, it is inapplicable when the central organ is diseased. It is certainly most difficult to hypnotize the mentally affected, whether the condition be mania, dementia, melancholia, or idiocy. Nevertheless, Voisin found he succeeded in about 10 per cent. of cases. But his physical strength, enthusiasm, and patience enabled him to do what few men would care to try. He used to spend an hour a day attempting to hypnotize one patient, and felt amply rewarded if after twenty operations he achieved an alleviation or cure. When he read his paper before the British Medical Association at Leeds in 1889, his listeners could only express astonishment at his method and its results. Voisin has done much good work in other branches of medical science, and practised with such openness and publicity at the Salpêtrière that no one can fail to be impressed by his testimony. Dr. Paul Farez, of Paris, speaks enthusiastically of Dr. Voisin's work, and emulates him in the time and energy he devotes to mental cases.

Personally, I have succeeded in somewhat benefiting

melancholia in five or six cases, and in removing slight but troublesome and long-standing delusions in several instances. In many cases of retarded brain development in children considerable improvement is observable; but in mental diseases generally I have, as a rule, failed to produce the slightest hypnotic influence.

Van Eeden considers that hypnotic suggestion will remove delusions in their early stage, while the patient is still aware of their falsity; but that when they have become established and a part of the personality, hypnotism, even if induced, can be expected to do but little good. This exactly coincides with my own experience, though in one case—that of a medical man who believed himself to be under the mesmeric control of a number of persons—I succeeded in greatly mitigating the symptom. I told him that I should be able to render him insusceptible to hypnotic influences other than my own, and my suggestions being thus more or less in a line with his thoughts, he was capable of grasping them. He came to me in a very depressed condition, but about twelve operations served to greatly modify the trouble. Though he still, from time to time, heard voices, he no longer dreaded them, and felt he was able to laugh at the threats they conveyed. He has been enabled to resume his practice, and has greatly improved in bodily health and in capacity for work.

A curious and typical case of this kind was that of a retired tradesman who consulted me in 1896, and asked me if I could free him from the mesmeric control of H.R.H. Princess X——. He said he was a stanch republican. About two years before he was visiting Windsor Park, and was sitting on a bench when the royal lady passed. She looked at him, but he did not rise or raise his hat, an omission which he said caused her to look angrily at him. He immediately felt a sharp pain in the back of his head, and he had been subject to this ever since. He was quite convinced the Princess had thrown a spell over him, which she exercised from time

to time to punish him for his want of courtesy. I thought I might succeed in removing the idea, but failed to do so. When I tried to hypnotize him, he said the lady put forth extra power, and neutralized my efforts; probably he will die with that delusion still dominant.

Another and more satisfactory case of a somewhat similar but much more acute nature was that of a young lady who became obsessed by the idea that her brother-in-law was in love with her, and was influencing her by 'hypnotic telepathy.' She became very excited, and refused to eat food, so we had to take steps to certify her and send her to an asylum. As a last resource I tried hypnotic suggestion, and, much to our satisfaction, she proved a good subject. The result was immediate. She consented to take food, became quiet and reasonable, and in a few days ceased to think of the man. This was in 1900. The following year she had a return of the morbid obsession, but it was speedily controlled by suggestion. Since that time she has remained sane and well. This girl was undoubtedly saved from lunacy by hypnotism, and such a success justifies one in having recourse to it in recent cases with considerable confidence, especially in young people.

Telepathy is the latest 'force' knocking for recognition at the gate of science. Its explanation is still involved in mystery and doubt, and therefore appeals strongly to the imagination. So we find telepathic obsession is a common idea with the insane. It used to be telephony, and before that electricity. Hypnotic obsession is also a common delusion. I am acquainted with two cases where the patient possesses unusual and even brilliant talents. One, a retired army officer, was assured by his 'voices' that the late Dr. William Playfair was hypnotizing him for experimental purposes, and he actually called on that astonished physician on the subject. As he told me that he would shoot the man who thus tampered with him, were he quite sure of the voices, one can judge of the dangerous nature of such an obsession.

It is an interesting point that this patient kept his idea almost to himself for over ten years. He told me and one or two others in confidence, but it was only when nominated to a high position that he betrayed himself. He was of course superseded, and has now a very real grievance against the voices which made him give himself away. I tried hypnotic suggestion in this case, on many different occasions at long intervals, but quite unsuccessfully, Major A—— always saying, like the previous patient, that the opposing forces are too strong.

But there is a form of mental disorder which, though not amounting to insanity, causes intense suffering, and which is not uncommon. I refer to obsession by obscene thoughts. Students of the religious history of the early Church, and of the lives of Christian and other saints, know how common this form of derangement was. The temptations of St. Anthony materialized were popular subjects for the old masters. I have been consulted in many such cases, and have succeeded in several instances in removing the morbid ideas, and restoring the patient's peace of mind. I always begin by telling the patient that we are not responsible for our thoughts, but only for our actions.

Two of my best cases were clergymen of exemplary life, and I have frequently found that it was men of the purest life and with the highest ideals who were victims of these thoughts. An extremely intelligent patient who went abroad after a course of treatment which he said cured him came to see me recently for a renewal of the suggestions. He told me that he had been enabled to keep his imagination under control ever since, but that he felt that it was once more getting the upper hand. Renewed suggestion again had the desired effect. He was a middle-aged man, happily married, and had several children.

In no country have the phenomena of hypnotism been more carefully studied than in Italy. The names of some

of the principal investigators—Lombroso, Tamburini, Seppilli, Tanzi, Morselli, Vizioli, Bianchi—are sufficient guarantee for the thoroughness of the work done.

A Commission of Italian physicians has been considering the therapeutic value of hypnotism, with special reference to its applicability in insanity and mental affections. After exhaustive researches they have come to the conclusion that hypnotic suggestion may be efficacious in dipsomania and the psychoses which are based on hysteria, but that in other forms of mental disease favourable results are only obtainable in a few cases. The Commission put the matter to the test by experimenting with great care and patience on fifty-six mental cases—thirty-two men and twenty-four women. Of the men, eight were affected with slight mania, nine with melancholia, eight with epileptic phrenosis, two with fixed ideas, and three with paranoia. Only two of these proved hypnotizable—one epileptic and one lypemaniac. Of the twenty-four women, four were affected with slight mania, nine with melancholia, seven with epileptic phrenosis, two with fixed ideas, and two with paranoia. Only eight of these proved hypnotizable, and of these three were hysterical, one melancholic, and four epileptic. In the other cases no effect was produced. The degree of hypnosis produced was generally slight, and somnambulism only ensued in three cases—two of which were hysterical and one epileptic. As regards therapeutic results, very little was achieved in any of the cases. In the opinion of the Commission, morbid auto-suggestion is an almost insurmountable obstacle—first, against the success of hypnotism; and, secondly, against the fulfilment of the curative suggestion. The Commission came to the conclusion that hypnotism was therefore applicable in only a few mental diseases, but they experimented on, and reported in favour of, the systematic employment of therapeutic suggestions, without hypnotism, in the treatment of insanity. They found that suggestion made in the waking state is the most effective and reliable means

of cure in mental diseases, and to it are due, almost entirely, the beneficial effects of the asylum—which represents a real suggestive surrounding.

'Summarizing now the results of our experiments, it appears that hypnosis was most readily obtained in cases of hysterical insanity, and in a few cases of epileptic insanity, but in other forms of mental alienation, despite our proceeding in accord with all the experimental rules, hypnosis, excepting in one case of anxious melancholy, was impossible.

'The results of therapeutic suggestion in mental diseases being examined, it seems to us that we may assume the following principal conclusions:

'1. Therapeutic hypnotic suggestion cannot be instituted as a general means of cure in the treatment of mental diseases, owing to the difficulty of hypnotizing the insane.

'2. Hypnosis succeeds most readily in the hysterical and epileptic.

'3. The most certain results of hypnotic therapeutic suggestion have, up to the present time, been obtained in the psychoses depending on hysteria and dipsomania.

'4. Hypnotic suggestion may be employed when the insane submit to it of their own accord, and derive benefit from it. The physician should use it with great caution, and take account of the hurtful effects which, in certain cases, may be produced.

'5. Therapeutic suggestion made in the waking state is the most reliable and effective means of cure in mental diseases, and to it almost solely are due the beneficial effects of the asylum, which represents a real suggestive surrounding.

'6. In cases of melancholia without delirium, cases of fixed ideas, cases of alcoholism, and in slight forms of stupor, suggestion methodically repeated in the waking state, in order to combat the morbid phenomena, may prove effectual.

'7. In the chronic forms of paranoia suggestion has never given favourable results.'*

It will be seen from this summary that the Commission advises the systematic employment of suggestion without hypnotism in some forms of mental disease. They were led to this conclusion by finding that a considerable number of the subjects whom they tried in vain to hypnotize were amenable to, and responded to, simple suggestion repeated regularly over considerable periods of time. In this way they succeeded in removing fixed ideas, *folie de doute*, and incipient melancholia in several cases. They also cured by this means a drunkard, whose allowance of alcohol was about ten bottles of wine a day; at least, he reduced his allowance to one bottle a day. They found simple suggestion proved effectual in several cases of stupor of the first degree, by removing the state of arrest which paralyzes the will and the ideational faculties.

Dr. Percy Smith and Dr. A. T. Myers made trial of hypnotism in a series of cases of insanity at Bethlehem, and the conclusions they came to are very similar to those arrived at by the Italian investigators.†

Forel found he could hypnotize even more than 10 per cent. (Voisin's proportion) of the insane who were confined in the public asylum of which he was superintendent, but he expresses great disappointment with the result (*op. cit.*). Even when he obtained advanced somnambulism, so that the patient proved anæsthetic, and susceptible to negative hallucinations, he often failed to remove a fixed delusion. For instance, Madame A—— fancied herself Madame B——. She was very susceptible to hypnotism, and Dr. Forel assured her in the somnambulic state that she was Madame A——, and not B——. She only shook her head, and even in this state refused to part with her

* 'Therapeusis of Mental Diseases,' by Dr. G. Seppilli, translated from the 'Archivio Italiano,' in *American Journal of Insanity*, 1891.

† 'On the Treatment of Insanity by Hypnotism,' *Journal of Mental Science*, 1890.

delusion. Forel, however, obtained good results in mental troubles of emotional and hysterical origin, and altogether is a strong disciple of the school of Nancy.

Dr. Forel showed me a curious condition of partial or complete analgesia which he is able to induce by simple suggestion in subjects whom he has frequently hypnotized. I saw him go up to strong, able-bodied German-Swiss attendants at his asylum, take them by the arm or hand, and tell them they had lost sensation in their right hand, left eye, or some other part; one could then prick the conjunctiva, or pinch the hand, without causing the least sign of pain or discomfort, though the subject would be apparently in full possession of all her faculties. It is common enough for dentists and surgeons to assure their patients that this or that procedure will not hurt, but the affirmation does not, as a rule, make much impression. Forel's assertion, however, did really paralyze the sensory nerve fibres, or inhibit the functioning of their cortical centre. I have been able in a few cases to copy this experiment, and notably in one case—a somnambulic gentleman of thirty-five of good bodily and mental health. Friction of a localized area of skin will produce anæsthesia in a few seconds, and he will then be quite unconscious of any irritation applied to it. On the other hand, a suggestion of hyperæsthesia will be followed by increased sensibility to impressions. This gentleman, though such a susceptible subject, is now quite insusceptible to the hypnotic suggestions of any save his two medical men, and his individuality has been strengthened by hypnotic treatment. (For anæsthesia induced by suggestion without hypnotism, see p. 81.) Forel made practical use of hypnotism in a peculiar way. The institution was undermanned, and he found the attendants whom he had to employ to look after suicidal patients at night required to be off duty during the day, and so reduced his staff. He hit upon the plan of hypnotizing these attendants, and telling them they might sleep, but that any attempt on the part of the patient to get out of bed would wake

them. He found his plan quite successful: the attendants got a fair allowance of sleep at night, and were able to work during the day.

Forel enumerates the following conditions and diseases which he finds most satisfactorily treated by hypnotic suggestion (*op. cit.*, p. 210):

Spontaneous somnambulism.

Pains of all descriptions, especially headache, neuralgia, sciatica, toothache, which do not depend upon an abscess, etc.

Sleeplessness.

Functional paralysis and contractures.

Organic paralysis and contractures (as palliative means).

Chlorosis (extremely favourable).

Disturbances of menstruation (metrorrhagia and amenorrhœa).

Loss of appetite and all nervous digestive disturbances.

Constipation and diarrhœa (provided that the latter does not depend on catarrh or fermentation).

Gastric and intestinal dyspepsia (including pseudo-dilatation).

Psychical impotence, pollutions, onanism, perverted sexual appetite, and the like.

Alcoholism and morphinism (only by the suggestion of total abstinence).

Chronic muscular and arthritic rheumatism, lumbago.

The so-called neurasthenic disturbances.

Stammering, nervous disturbances of the vision.

Blepharospasm.

Pavor nocturnus of children.

Sickness and sea-sickness, the vomiting of pregnancy.

Enuresis nocturna (often very difficult on account of the depth of the normal sleep).

Chorea.

Nervous attacks of coughing (also in emphysema).

Hysterical disturbances of all kinds, including hystero-epileptic attacks, anæsthesia, phobia, and the like.

Bad habits of all kinds.

I have quoted the above *in extenso* because Professor Forel is a distinguished man of science and an original and fearless thinker, who does not hesitate to examine and criticize mercilessly his own as well as other people's impressions. He has retired from practice, and has no self-interest to serve, but is simply impelled by love of truth to champion a somewhat unpopular cause. It may be noticed how closely his deductions correspond with those I have set forth, and it is most gratifying to me to find that my observations are confirmed by such an eminent authority.

Forel believes strongly in the value of hypnotic suggestion in the education of perverse children, and he attributes the success of many schoolmasters to the wise but often unconscious use of suggestion.

Advocating the use of hypnotism in general practice, Forel says one is apt to greatly undervalue the palliative action of suggestion. It is invaluable as a regulator of digestion, secretion, and menstruation, and is quite harmless, in contradistinction to the scandalous abuse which so many practitioners make of narcotics and alcohol. Forel considers that the teaching of psycho-therapeutics should form part of the curriculum in every medical school, and that in this way only can the medical profession hope to hold its own in its fight with quackery and deception. He acted upon this belief during his professorship at Zurich University by conducting a clinique for the instruction of students and post-graduates.

Alcoholized persons are generally good subjects for the treatment, but I have never succeeded in hypnotizing a person for the first time while in a state of intoxication. It is necessary to wait until the first effects of the stimulant have passed off. The effect of hypnotic treatment in chronic alcoholism is very marked. The patient often first comes under observation suffering from the physical effects of his indulgence. Probably he has subacute gastritis with morning-sickness, furred tongue, flatulence and heartburn, headache and heaviness in the head, cold-

ness of the extremities, with weak, irritable pulse and irregular action of the bowels. These symptoms, as well as their mental accompaniments—languor or extreme restlessness, despondency, and irritability—very speedily yield to the treatment, so that it is no uncommon thing to see the chronic drunkard well on his legs within a week.

I have tried the action of various drugs as aids to producing hypnosis in intractable cases, but neither subcutaneous injections of morphia, inhalation of chloroform or ether, cannabis indica, nor bromides, have seemed to exert any marked effect in that direction (see p. 235). Hypnotism seems a psychical condition *sui generis*. Alcohol, however, appears to predispose to hypnotism, and I frequently find a subject is more amenable after a good meal than he is before it. Hypnotism practised in a rational manner is not fatiguing or trying in any way, and no concentration of the operator's mind or direction of his will seems to be required. The late Dr. George Wyld, a survival from Elliotson's days, told me he used to concentrate his mind on the passes he made, and imagine he was throwing off nervous force from the tips of his fingers, with the result that he soon exhausted himself; but when he adopted the Nancy method he no longer took so much out of himself, though he got equally good results. Liébeault was old and not robust, yet he hypnotized sometimes as many as forty people in a morning. The idea of personal influence and magnetic attraction, so industriously promulgated by interested public performers, and so objectionable to most people, is entirely discountenanced and denied by scientific practitioners.

In the foregoing remarks an endeavour has been made to answer many questions which are constantly being put to the practical hypnotist. The answers are founded on experience which it is in the power of any medical man to verify. The cases described in the following chapter are by no means exceptional, but are fairly illustrative of the use of hypnotic suggestion in ordinary practice. The results are certainly no better than would be attained by

any trained medical man using the same method with a due regard to its technique.

Liébeault never attempted to hypnotize a patient for the first time if there were a spasm of pain, an access of retching or vomiting, or great emotional disturbance. An attempt to employ suggestion under such circumstances would almost certainly result in failure, and would endanger the success of future efforts. I always wait until the paroxysm is over, or, if the pain is continuous, I give an anodyne, and only try hypnotism when the disquieting symptoms are veiled by the drug.

After the patient has been thoroughly accustomed to the treatment, it is often possible to hypnotize even while he is suffering great pain, as I have seen in cases of acute rheumatism and neuralgia. But even when the patient is a good subject pain may render the process of no avail. Under such circumstances I again have recourse to an anodyne, and when the severity of the pain is subdued there is rarely any further difficulty in inducing the usual degree of hypnosis.

As an example of this, I may refer to the case of a gentleman who came to me to be hypnotized for locomotor ataxy. After the second sitting he experienced no more pain for nearly three months. Then he was caught in a storm, and sat for some time in his wet clothes. A violent attack of pain came on the night following, and he got to my house with much difficulty the next day.

The lightning pains in his thighs were so severe that they made him scream out, and they were almost continuous. He was only susceptible to the first degree, and it would have been useless to have tried hypnotism under the circumstances. After the injection of half a grain of morphia, in divided doses, he at last became quiet and free from pain, and I then hypnotized him with success, and he remained free from pain for a long time. He, however, returned regularly for treatment every two weeks, and I find that repetition of the operation at about that interval is necessary in these cases. Dr. Van

Eeden told me, and I have fully confirmed his observation, that when natural sleep is induced instead of the hypnotic state, the subject is not in touch with the operator, and is therefore insusceptible to suggestion, and no benefit then results from the operation. I have seen natural sleep instead of hypnosis induced by suggestion several times. I have found hypnotic suggestion very successful in many cases of peripheral neuritis, especially when of the alcoholic variety. Relief of pain and restoration of function in some of these cases is so immediate that it has to be seen to be believed.

Forel has stated that it is very inadvisable to hypnotize insane and weak-minded persons in company, as they are very apt to be acted upon by suggestions meant for other patients. I have always found that the more private and serious the procedure is made, the better is the result—at any rate, with English patients. Dr. Crichton Miller, however, has adopted the Continental method, and claims much success from collective hypnotism.

I have failed to get any improvement in a case of paralysis of the right arm dependent on spinal sclerosis; nor have I been more successful with an old-standing right hemiplegia, with late rigidity, in a young man of twenty-one, dating from an attack of infantile convulsions, and dependent on cerebral lesion.* I gave up a case of congenital chorea, as it was impossible to tell if the

* The improvement I have seen result from suggestion in several cases of locomotor ataxy would encourage me to try the treatment in organic cerebro-spinal diseases. Drs. Fontan and Ségard, Professors at the Medical School of Toulon, have published in their 'Éléments de Médecine Suggestive' clinical notes of a case of disseminated sclerosis of the cord. The patient improved so much under hypnotic treatment that doubts were thrown on the accuracy of the diagnosis; but the man returned to the hospital the following year and died there of acute tuberculosis. A careful necropsy was made, which revealed very extensive patches of sclerosis, chiefly in the left lateral column, and rendered the improvement somewhat extraordinary. As Bernheim says, there is, no doubt, a great deal of sympathetic and functional disturbance of the neighbouring centres and structures in many forms of cerebro-spinal disease, and it is this element which can be reached by suggestion.

patient—a boy aged eight, of weak intelligence, but great cunning—was really influenced, or was only pretending. I am unable to say much of its use in epilepsy. In some cases the fits have diminished in number and intensity at first, but they have generally reasserted themselves. Several times, however, I have persuaded the patient to leave off taking bromides, and have generally found that hypnotic suggestion, as long as it is used, will enable the sufferer to dispense with drugs. In cases of bromism this is by no means a small gain.

In the *Zoist* and other mesmeric publications of the last century one frequently comes across references to the successful treatment of epilepsy by mesmerism, but there is generally a want of scientific accuracy in the accounts of such cases which very much weakens their value.

On *a priori* grounds hypnotism might be expected to exert a powerful influence in epilepsy, and I confess that the rarity with which it has effected cures is a matter of much disappointment to me.

Hypnotism undoubtedly affects the cortical cells, as does epilepsy, and its action on them should be regular and orderly, instead of explosive and destructive. In fact, it might be expected to act as a physiological corrective by controlling irregular nervous discharges, breaking the morbid nerve habit, and conserving the energy which epilepsy dissipates. No doubt hypnotism does act in this manner in most cases of hysterical origin, and in some where no hysteria is present. In long-standing cases, when the disease is hereditary, or when it has a traumatic origin, I should hardly expect, from my experience, to find hypnotism of much value; and, of course, where the disease is traceable to a reflex irritation—*e.g.*, unerupted wisdom-tooth, elongated foreskin, visual defects—this should be put right. It is, however, always justifiable to make a careful trial of hypnotism in cases of epilepsy, for there are many cures now recorded on the best authority. I have cured one case of true epilepsy of

recent development in a youth of sixteen, and I have frequently seen it useful in modifying the number and violence of the attacks.

For instance, a young lady, aged twenty-two, was brought to me in 1894. She had developed epileptic fits at the age of puberty, and they were only kept in check by large and continuous doses of bromides. Her mental condition had undergone great impairment, and she was always in a dreamy state. She kept a book in which she made a note of each attack, and altogether she lived in an atmosphere of depression and morbid suggestion. But the symptom which caused most embarrassment, and which cut her off from social life, was the unfortunate delusion which always prevailed when she came out of the fit, that she was going to bed, and she would proceed to undress herself wherever she might be. The fits were always ushered in by an aura starting from her right hand. I found her a good subject, like most epileptics, and responsive to suggestion. I suggested that when she felt the tingling in the hand going up the arm she should be able to prevent the fit by tightly clasping the hands together, and that she should, even if a fit occurred, always come out of it quietly, and know where she was.

The bromides were entirely left off, and the dismal diary was thrown away. The girl improved wonderfully in general and mental health, but the fits still occurred about twice a week. On several occasions she was able to avert them by the pressure as I had suggested, thus establishing an inhibitory influence over the nervous discharge. But the case was too far gone to admit of cure, and we never got beyond a certain point. However, she has never since committed any social solecism in the post-epileptic state, and is able to go a little into society.

I have had recently under treatment a medical student aged twenty-one. He is bright and intelligent, and able to judge his own case very well. He has had the opportunity of trying many treatments at the hands of

some of our best physicians, and has come to the conclusion that hypnotic suggestion does him more good than anything else. It certainly has diminished the number and severity of the fits, and his general health has improved with the giving up of strong drugs.

In one case I thought cure was effected, for the patient, a City clerk, aged nineteen, went for a year without a fit. Previous to treatment he used to have a bad one about once a week. I believe the young man would have been permanently cured had he taken care of himself and led a rational life. But when he got better he used to drink, frequent heated music-halls, and dissipate generally, so that no treatment had much chance, and he is now, I believe, a hopeless case.

Wetterstrand of Stockholm had considerable success in the treatment of epilepsy by prolonged hypnosis. In some cases he kept the patient asleep as long as six weeks at a time. He renewed the suggestions daily, and the patient used to eat and perform the usual functions in response to suggestion.

The physiological indications in favour of this treatment are strong. During hypnosis the higher cortical centres in which the nerve storm has its origin are kept in a state of rest, morbid association and periodicity are interrupted, and time given for the weakened and impoverished cortical cells to recuperate and become healthy.

It may here be mentioned that Auguste Voisin thus treated at the Salpêtrière several cases of periodic attacks of mania occurring in women. He succeeded in curing some of them by the ingenious device of hypnotizing them before the period was expected, and keeping up the hypnosis during the critical time.

I have only had the opportunity of trying this treatment in two cases. Both subjects were hysterical girls, and I found the prolonged sleep beneficial. In one case I kept it up for three, and in the other for four, days.

Dr. Barwise quotes a case in which a lady was quite cured of confirmed epilepsy, and is now the healthy

mother of a healthy family. He himself has treated four cases—two of congenital epileptic imbecility which were unaffected, and two the nature of which he does not mention. One is completely cured, and the other has a fit about once in three months, as compared with one or two seizures a week.*

Dr. Barwise has kindly supplied me with the following further particulars about these cases (May, 1891):

'The girl, aged about eighteen, began having fits when menstruation appeared. I saw her in Birmingham about a year ago, and she had had no recurrence. Before trying hypnotism I had given her bromides and the usual routine remedies. In the case of the woman patient there was no history of injury, but the attacks were preceded by a feeling of numbness and powerlessness of the left hand.'

Bérillon treated twenty cases of epilepsy in 1889 and the first half of 1890. He found hypnotism curative in only four cases.

In six other cases the treatment was beneficial in reducing the number of the attacks, diminishing their severity, and improving the general health, the memory and mental condition being notably ameliorated. In the ten other cases the results were negative.

Dr. Outterson Wood tells me he has effected a great improvement, which seems likely to be permanent, in a case of undoubted epilepsy of long standing.

Van Renterghem and Van Eeden treated seven cases of epilepsy during 1887-88, and their results are not encouraging. In two cases no effect was produced, and in four only slight or temporary benefit followed the treatment. In a case of hystero-epilepsy in a medical student, brought on apparently by the malpraxis of a travelling magnetizer, they were successful, as already mentioned, in stopping the attacks.

Liébeault considers that epilepsy may frequently be cured by hypnotism when it does not depend on gross organic lesion. He counsels perseverance in the treat-

* *Op. cit.*, p. 20.

ment, and cites the case of an unmarried woman, aged thirty-nine, affected with epileptic vertigo from her birth. He continued the treatment assiduously for four years, and at the end of that time the patient was cured, and has continued so.*

Milne Bramwell says his results in epilepsy have been encouraging, but not convincing. Out of ten cases five were markedly improved, but none recovered completely.†

The question of the curability of organic disease by any method of treatment is one of much interest, and does not affect hypnotism alone, but all therapeutic methods equally. The answer depends in a great measure on what we mean by cure. If we mean only removal of symptoms and arrest of active disease, it is certain that the question is answered in the affirmative every day, for we see patients with obvious signs of phthisis pulmonalis, for example, frequently restored to what may pass for sound health by many forms of treatment. But if we mean restoration of structurally degenerated and altered tissue, I think no physician will have the temerity to maintain that destroyed lung tissue can be restored, or that liver cells spoilt by cirrhosis can be replaced. But there are stages in a disease short of the stage of dissolution of tissue, in which, if healthy action can be set up, we may hope for *restitutio ad integrum*—for example, in the early period of fatty degeneration of the heart, before the muscular fibres have completely lost their character; in the first oncoming of Bright's disease after scarlet fever, before the excreting structure is seriously compromised.

Even when structural alteration has gone so far that restoration of the tissue to its normal quality is impossible, we can often prevent the extension of degenerative changes, and can favour a compensative increase of functional activity in the healthy tissue which remains—*e.g.*, compensative hypertrophy in valvular disease, hypertrophy of the healthy kidney when the other is destroyed.

* *Op. cit.*, p. 144. † *Op. cit.*, p. 257.

We can also afford relief by removing symptoms and reducing them to their anatomical expression (de Watteville), as we endeavour to do in incurable diseases, such as cancer and tabes dorsalis.

There is a great choice of treatment for the attainment of these various indications, and no sensible medical man feels bound to any one of them, or maintains that it is the only method which can afford relief. Sometimes no treatment is required, and the only indications are to place the patient under the most favourable conditions for the *vis medicatrix naturæ* to act. In other cases a course of hydropathy or massage favours the curative processes, and in others, again, drugs exert a specific effect. Take, for instance, a case of locomotor ataxy. Sometimes the gait may be improved and the pains relieved by suspension or by re-educational exercises; by drugs, especially strychnia and antipyrin; and by hypnotic suggestion. From the way many persons criticize hypnotism and hypnotics, one would suppose that we employed this agent as a panacea in every case. This is exactly the position we want to avoid and intend to keep out of. But we feel that it is a very great point to have at our disposal a method of treatment to which we can have recourse when other remedies have failed.

The late Mr. Ernest Hart was strongly opposed to the use of hypnotism. He said it was not wanted, for we had other, more reliable, remedies for every curable disease. One can only envy Mr. Hart the good fortune which must have attended him in his practice. Most of us find it otherwise, and an additional weapon in our armamentarium is not to be despised.

The saying, 'Nature is a good physician but a bad surgeon,' is on the whole true, for the tendency; fortunately, in most acute diseases is restoration towards normal health if the conditions are favourable. Hence we meet medical men in large and successful practice, whose experience lies chiefly with acute illness, perfectly satisfied with things as they are. But even they will find

hypnotism useful in relieving symptoms and promoting convalescence.*

When we come to chronic disease it is otherwise, and a vicious circle, once entered upon, is apt to grow wider in extent and permanent in duration unless broken by appropriate treatment.

In treating it the conscientious practitioner is often reduced to his wits' end to know what to do for his patient's good, and he will be well advised to try hypnotic suggestion, either himself or through the agency of a medical friend.

I would again urge medical men to try hypnotism first, and not last. Over thirty years ago, when I first began to use hypnotism, I was asked to address an audience of medical men in North London on the subject. Discussion was invited, and I was considerably heckled. I remember one gentleman was very outspoken. He asked if I advised him to hypnotize the next patient who came to his surgery with stomach-ache, and ended his harangue by betting me five pounds that I could not hypnotize him! So much has professional feeling altered in the last few years that I doubt if any medical man to-day would display such ignorance.

I have tried hypnotism in about fifty cases of stammering, and in half of these I have found it useful. In two cases, those of schoolboys, complete cure resulted, and in six others there is so much improvement that little inconvenience remains. One of the patients is a barrister, who was debarred from pleading in court by his infirmity. He was only slightly susceptible to hypnotism, but he improved rapidly, and he has recently written to tell me

* It has been said that out of a hundred patients under the care of an ordinary practitioner, 80 per cent. will get well with ordinary routine treatment, 10 per cent. will require special treatment, and 5 per cent. will prove incurable to any treatment. The residual 5 per cent. is almost a negligible quantity to the busy practitioner, and is the source from which the *clientèle* of specialists, orthodox and unorthodox, is drawn. A large proportion of the two latter classes could be benefited or cured by hypnotism.

that he has been appointed Recorder of a large town, and fills that important post with satisfaction.

Another recent case is that of a medical student who had repeatedly failed at his *viva-voce* examination, not, he said, from want of knowledge, but from a mental confusion which seemed complementary to the physical difficulty of speaking the necessary words. All his attention was required for the mechanical work of articulation, and he could give none to the subject-matter. Probably the stammerer is often handicapped in this way, and I think the remedy is, if possible, to bring about a natural automatism in speaking. The mistake made in many systems is that the attention is more than ever directed to the weak spot, and morbid self-consciousness, which is such a prominent feature in stammering, is thereby increased. Dr. Percy Allan has had considerable experience in the treatment of stammering, and reports some marked successes.

I always try to impress upon stammerers that clear and easy articulation is a natural act, and should come spontaneously. It is like walking. If one tries to walk elegantly and pick one's steps, the result is probably a very halting performance, and it is often the same in speaking.

I have observed a great many patients who have been under the treatment of different professors of voice production and elocution. They have been given elaborate exercises, and have probably benefited as long as they carried out the rules laid down, and continued under the eye of the master. But return to the normal conditions of life has generally brought about a relapse. One of the worst cases of stammering I ever heard was that of a young Cambridge man who had for six months been the show pupil of a voice specialist.

These systems attack the periphery instead of the centre, and I am afraid only rarely cure the patient.

It is interesting to note that these views are shared by Mr. Appelt, a professional but non-medical voice specialist. He attaches great importance to the psychic and nervous

element in stammering, and treats his cases by a modified psycho-analytic method.*

Dr. Forbes Winslow claims to cure many cases by transfer. I have only tried this method once. The patient was a young undergraduate with a very bad stammer. He was not a good hypnotic subject, and suggestion had done him no good. So I hypnotized my friend G——, a rather distinguished wrangler, who is a somnambule, in his presence, and told him to take on the stammer, and imitate the patient's speech exactly.

When I awakened Mr. G—— he acted the part beautifully, and I impressed upon the patient that his burden was being borne by my friend, and that he was relieved of it. It was certainly a strong appeal to the imagination, but it did not work; and I found myself with two bad stammerers instead of only one, until I rehypnotized G—— and restored him to normal speech.

Dr. Wingfield is very successful in his treatment of stammering by hypnotic suggestion, and he tells me he has sometimes succeeded in curing cases of long standing in a few sittings. He has cured six cases out of twelve, some of them very bad ones.†

A bad stammer is a terrible handicap in the battle of life, and any means of curing it should be welcomed as a boon. I think hypnotic suggestion is the most hopeful remedy in the case of young adults, and that it will generally succeed in curing children if systematically employed before the habit has become fixed and permanent.

In the summer of 1905 I was asked to test the value of hypnotic treatment on five Board-school girls, of ages varying from nine to thirteen. Of these, one child proved insusceptible after repeated trials, and one became somnambulic. The other three were influenced to the third degree (Liébeault). The somnambulic child happened to be the simplest case, and was completely cured in a few sittings. One of the other children had such a bad

* 'Stammering and its Permanent Cure,' by A. Appelt. 1910.
† *Op. cit.*, p. 148.

stammer as to be almost unintelligible, and she was little, if at all, benefited. The other two improved considerably under treatment, and would, I think, have been cured if it had been possible to give them lessons in proper voice production at the same time as the hypnotic suggestion.*

If it is of importance, in some cases, to transfer normal actions from the domain of excessive consciousness to that of subconsciousness, it is no less important, on the other hand, to be able at times to reverse the process, and to bring morbid actions which have become automatic under the direct action of the will. Nail-biting is an example of what I mean. Here the habit has become automatic and unconscious, so the child puts his hands to his mouth and destroys his nails without knowing it, until perhaps he has gnawed them to the quick, and is rendered conscious of his act by the pain. Acting on Bérillon's advice, I have, in treating these cases by suggestion, made it my aim to bring these unconscious morbid actions into the sphere of consciousness, and establish, as it were, a fence of inhibitory suggestions to protect the threatened part. The child is told that in future, when he moves his hand to the mouth to bite his nails, he will feel a heaviness in his arm and shoulder and a tingling in the fingers, which will continue until he calls his conscious will into play and checks the impulse. An inhibitory centre is thus educated; and I have found this treatment successful in a number of cases, not only of nail-biting, but of other bad habits. The same principle is sometimes acted upon in the treatment of drunkards. The patient is told that if he attempts to raise a glass of spirits to his lips, his arm will become paralyzed, and he will drop the glass.

* Our object in undertaking these cases was entirely in the interest of truthful investigation, and at the close of the treatment we wrote to the teachers and parents asking them if they found the children benefited. The parents evidently thought that we sought testimonials for advertising purposes, for they supplied most glowing ones, even concerning the poor child who had derived no appreciable benefit. This good-natured facility showed us how easily such testimonials are manufactured.

I feel perfectly convinced that hypnotic suggestion is the ideal treatment for curing morbid habits in children. If the child is a good subject, as most children are, the effects of bad heredity can be neutralized by it.*

In incipient melancholia, and in depression of spirits short of this, I have found it of service; but hitherto I have failed to notice much effect from it when the condition was of long standing. On several occasions I have succeeded in removing false ideas, as in the case of a gentleman who was afraid to enter a dark room in consequence of having been frightened by ghost-stories when a child. One frequently finds morbid fixed ideas depend upon a suggestion made in early life, and these are well met by a course of counter-suggestion.

I was once consulted as to the case of a young professional man, who was afflicted with bulimia, a form of morbid craving which is, I believe, uncommon. He has periodical attacks of irresistible craving for food, analogous to the desire for alcohol felt by dipsomaniacs. He feels these attacks coming on, and begs his friends to look after him, and take care of his money and jewellery, lest he should pawn them for food. But, in spite of everything, he finds means of raising money, and with it buys food to an enormous amount. This he secretes and gorges himself with until he can eat no more. For instance, on one occasion he bought and devoured within a few hours a quartern loaf, two pounds of cheese, a tinned tongue, a quantity of pastry, a pot of jam, and a large assortment of sweets. The bout is followed by violent sickness and a bilious attack, which lasts for some days. Hypnotism

* A great deal is written nowadays about eugenics and heredity, and while acknowledging their importance, I confess to thinking environment and education are still greater factors in human progress. I once asked a friend much engaged in philanthropic work among working boys whether he would feel most hopeful dealing with a dozen lads—sons, say, of Bishops—brought up in slums under the worst conditions, or with an equal number of sons of convicted criminals brought up under perfect conditions. He unhesitatingly replied that most of the former would turn out badly, and most of the latter would do well. Of course, the ideal is to combine good heredity with good upbringing.

offers the best hope of cure in such a case; but, as illustrating the prejudice against the remedy in some quarters, the patient's friends have persuaded him not to try it, but to live as a voluntary boarder in a lunatic asylum !

This is only one case of several where the fear of hypnotism has been so great as to make the patient refuse to submit to it, though his condition was desperate. I was recently consulted about a young lady whose health and safety were gravely menaced by her habit of sleep-walking; so bad had this become that she used to get herself tied into bed at night. Yet she refused to let me try hypnotism, as she had been warned against it by an elderly doctor whom she trusted. This was particularly unfortunate, because spontaneous somnambulism is one of those troubles which hypnotism cures with the greatest certainty. I cured the only three cases I have treated, and Sir F. Cruise tells me he has had similar results. It appears to me that the doctor allowing a patient's life and happiness to be wrecked by such ignorance and prejudice incurs a terrible responsibility.

I have notes of a remarkable case of this kind. The patient, a young Irishwoman, was sent to me by the late Sir Francis Cruise in 1910. She was a hard-working, bright, tractable girl during the day, but nearly every night became a dangerous maniac, striking those about her and breaking furniture. Dr. Haydn Brown kindly took her into his house at Caterham and treated her by hypnotic suggestion. He watched by her bedside the first two nights. The first night she seemed to awake after a few minutes' sleep, stared wildly about her, and leaped out of bed. Though her hands were tied, she drew the heavy bedstead across the room, and was quite maniacal. Dr. Brown had hypnotized her the previous day, and now he had only to speak forcibly and put his hand on her head and she went back quietly to bed. The following night there was less disturbance, and afterwards none at all. The patient returned home cured, and was married soon afterwards.

Hypnotism introduces one to curious histories. I undertook with some confidence the case of a gentleman, aged fifty, who for three years had suffered from a curious antipathy, apparently half mental and half physical. He was unable to remain in the room with his youngest son, a bright, intelligent boy of twelve, on account of the feeling of restlessness which used to come over him, followed by flushing of the face, noises in the ears, confusion of thought, and palpitation of the heart. He was perfectly sane, held an important financial position, and there was absolutely no cause to account for the sensation. The feeling was confined to this particular boy. At first I found it impossible to influence him sufficiently to master his *idée fixe*, but later on he developed into a fairly good subject.

In December, 1889, the gentleman came to see me, not as a patient, but as escort to a lady who wished to be hypnotized. The lady was nervous, and Mr. X—— offered to let me demonstrate the process on him. To our mutual surprise, he yielded to the soporific influence, and fell into the second stage of hypnotic sleep after looking at a bright disc held above his eyes for a couple of minutes, and I was at once able to make suggestions combating his delusion. He experienced less discomfort than usual from his son's presence that evening, and there was no difficulty in hypnotizing him subsequently. The morbid idea was of three years' persistence, was steadily increasing in intensity up to the time of his being first hypnotized, and was a cause of serious distress and worry to him. I had endeavoured to influence him no less than ten times previously with absolutely no effect, and I attribute my ultimate success to the fact that his mind was taken off its guard; and the nervousness and unconscious resistance, which had prevented any hypnotic effect when he came as a patient, were no longer existent when he returned merely as a spectator. Readers of fiction will remember that Oliver Wendell Holmes learnedly discusses a somewhat similar train of symptoms, upon which he founds his novel, ' A Mortal Antipathy.'

In many forms of genito-urinary troubles I have found suggestion a useful auxiliary in treatment; nor is this to be wondered at when we consider the amount of functional disturbance which is present in these cases. I have cured two very bad cases of prostatic neuralgia, and a most obstinate one of pruritus vulvæ, which rendered the patient's life a burden to her. In many forms of rheumatism the effect of hypnotic treatment is at first sight surprising. It very frequently removes pain, even in chronic rheumatoid arthritis. There is a great deal of neuralgia mixed up with most kinds of rheumatism, and suggestion enables us to meet this, and at the same time to bring about an alteration in the local blood-supply, especially if aided by friction.*

Braid was extremely successful in treating these cases, and he used to combine a good deal of manipulation with hypnotism. This manipulation acted in two ways: first, on the part, by helping to break down adhesions, stimulating the muscles, etc.; and, secondly, on the central nervous system, by suggestion and direction of the mind to the affected part.

In treating local troubles, it is very advisable to combine Braid's manipulative method with Liébeault's suggestions. In cases of rheumatism I have frequently seen the joint to which this double treatment has been applied quickly relieved from pain, whilst the corresponding one has continued painful until attention was specially directed to it.

I have succeeded on two or three occasions in breaking down adhesions about rheumatic joints without pain, when the patient would not allow me to touch them in his normal state.

* Rheumatism, both muscular and articular, is peculiarly under the influence of suggestion, hypnotic and otherwise. One sees this in the advertisements of the day of prairie oil, electropathic belts, and antirheumatic rings. The last named are having a great vogue, partly in consequence of the testimonial given by a popular Archdeacon. The old-fashioned remedy for rheumatism, half a raw potato carried in the pocket, has still many advocates, and possesses the advantage of cheapness!

I met with rather a striking case in 1896. The patient was a country practitioner, and had suffered from obstinate rheumatism of the right deltoid muscle for several months. As his practice was a driving one, he found the condition extremely inconvenient as well as painful. He had tried injections of morphia into the substance of the muscle, and had been treated with massage and electricity without benefit. The arm was becoming wasted from disuse, and any movement of the shoulder caused acute pain. He was hypnotizable to the third degree, and I suggested that he should feel no pain when I moved the shoulder, and that there should be no tenderness on pressure. I cautiously swung the arm round, and freely massaged the muscle without his wincing, and in a few moments I told him to open his eyes and try for himself. He found himself much relieved, and the improvement was still more manifest when he came to see me next day. The treatment was repeated on that day and the one following, and he then returned to his practice cured. He was so much impressed by what he had experienced that he took up hypnotism enthusiastically, and began to use it with his patients. He performed two or three minor operations under hypnotic anæsthesia, and relieved many cases of insomnia, neuralgia, and nervous trouble generally. But the village in which he lived was exceptionally antiquated, and the people would have none of this ' new witchcraft.' Dr. S—— found he was looked at askance, and began to lose his practice. Being a family man, and a sensible one, he argued that if his patients did not want the best treatment he could offer them it was not for him to force it on them to his own ruin. So he wrote a letter to the greatest gossip of the neighbourhood renouncing his advocacy of hypnotism, and undertaking never to use it again in the place. He was received back into the fold of orthodoxy as a sinner who had repented, and he has his reward.*

* The Psycho-Medical Society was started with the idea of giving backbone and support to doctors who are handicapped in

Hypnotism sometimes enables us to understand the nature of a case which has baffled treatment. It threw a flood of light, for instance, on the case of Mrs. B——. This lady came to me suffering from very severe facial neuralgia of more than a year's duration. She was a thoroughly good, well-intentioned woman, who, in addition to devoting herself to a rather exacting husband and seven children, spent several hours a day 'slumming' in a large town. She kept irregular hours, and neglected herself in every possible way, with the result, of course, that she broke down. But she considered it her duty to sacrifice her health, and, in spite of illness, continued to overtax herself. She came up for two weeks' treatment, and I hypnotized her daily. She was only slightly susceptible, but quite sufficiently so for our purpose. She told her husband after two or three days that, though she was getting better, this was due to the change and rest, and that she was not hypnotized. He very sensibly told me this, and enabled me to make a necessary change in my methods. I hypnotized her as usual, and asked how she felt. She replied that she was comfortable, and that the pain was better. I then told her she could not open her eyes, and she tried in vain to do so. Then I assured her that she was under hypnotic influence, that she would

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their researches by being isolated and cold-shouldered. Dr. Hugh Wingfield, in joining the society, writes: 'I hope the new society will succeed in removing the prejudice against hypnotism in England. . . . I am very glad it has come at last.' He adds: 'I make use of hypnotism a good deal in cases of dipsomania, and the results are to me astonishing.' The need of such a society was felt by my friend Dr. B—— some years ago. He was house-surgeon to a provincial hospital, and in the wards was a patient with stammering bladder. All sorts of treatment were tried unsuccessfully, and at last Dr. B—— hypnotized him and applied suggestion. The man was almost immediately cured, and left the hospital full of gratitude. But the chairman of the board of management severely censured Dr. B——, and told him he must not again use mesmerism in the hospital, as it would bring the institution into bad repute. For years Dr. B—— was afraid to speak of hypnotism; but times and opinions changed, and he now has an extensive practice, and is making a large income as a psycho-therapist.

be cured, and that she would not be able to open her eyes until the pain had quite gone.

For twenty minutes it was a duel between us, for all the time she was trying to open her eyes, while I was suggesting she could not until the pain was cured. Gradually she acknowledged that it was getting better, and at last she said it was gone, and opened her eyes. She had no more pain, and returned to the country quite well and strong. She remained well for six months, though she again systematically neglected all the rules of health; and then I heard she had another breakdown, accompanied by severe sciatica.

This lady was one of those who hug their infirmities and call it 'bearing their cross.' She was quite sulky when she had to give up her neuralgia, though, of course, she would not admit it. It had become a part of her personality. Sometimes one is told by such patients that they would not know themselves without their disease. Many people allow themselves to fall into a state of invalidism because it is, they think, interesting, and appeals to their friends' sympathies; and others take up the rôle because they find it is one they can fill gracefully, perhaps after having failed in other walks of life. This point is more fully dealt with by Dr. Allan in his chapter, especially with reference to the practice of Dr. Hurst.

Doctors and nurses are kindly people, and may often be termed professional sympathizers. I knew one rich young woman who was never so happy as when in a nursing home preparing for an operation. She had had both ovaries and one kidney removed. While her younger and more attractive sister and rival was enjoying the normal life of a young girl of means, this poor woman had her coterie of sympathetic and admiring friends and doctors. She was much benefited by a course of suggestion, and was led to regard life from a new point of view. Many chronic invalids are always kicking against the pricks, and are obsessed by the idea that 'Providence has a special down upon them.' Removal of this sense of

grievance is the first step towards a better state of things, and hypnotic suggestion greatly helps to do this.

The subconscious mind is a strange thing, and plays curious pranks with our health and thoughts. It is not reached by drugs, but by psychical influences, and I believe hypnotism to be the best and most philosophical way of employing these. The researches of Freud and the methods of psycho-analysis throw a flood of light on this strange warping of the personality and the vagaries of invalid subconsciousness.

The sick man may be likened to a person fallen down into a well. It is generally sufficient to lower a rope and haul him up, the subject adjusting the rope around himself and co-operating with his rescuers. But the well may be deep and the injury caused so serious that the subject is unable to help himself, and the rescuer has to descend and adjust the rope round his helpless body and so effect his relief. Again, the subject may be insane to start with, or have been rendered so by the fall, and instead of co-operating with his rescuer or being passive, may actually fight against him and require compulsory salvage. I should say the patient the practitioner has generally to deal with belongs to the first class. Most hypnotic patients belong to the second, and deep hypnosis and psycho-analysis often make it possible to successfully treat the third class.*

* I have come across many cases illustrating this point. For instance, one wealthy neurasthenic gentleman wanted to make a bargain with me to keep him in my house for a year on the understanding that he should pay me £700 if I succeeded and nothing if I failed. To him I replied that I was open to a 'sporting offer,' but on rather different lines—viz., that he should pay me only half fees if I succeeded and double ones if I failed. For if the physician got neither success nor money, his case was doubly hard. Of course the patient did not accept my offer, and I expect he is still going about from cure to cure at home and abroad. Another patient assured my housekeeper, with great satisfaction, that she had worn out fifteen doctors! I once took such a patient to a well-known alienist, who at once realized the position and said to him: 'My friend, the trouble you suffer from is damned selfishness, and that same fills half the lunatic asylums in the country.' One is always being asked to make silk purses out of sow's ears, and a good doctor sometimes sacrifices himself in vain for a bad

Forms of insanity which were once thought to depend upon obsession and demoniacal possession are now known to arise from perverted subliminal consciousness. Janet relates many cases, some of which are quoted by Myers. For instance, that of a commercial traveller who became absolutely sleepless, and thought himself possessed by the devil. Ordinary attempts to hypnotize him failed, until Janet humoured the morbid idea, and addressed himself to the obsessing devil. He defied him to put his victim to sleep in a certain chair. 'The devil' fell into the trap, and the man fell into a sound sleep. Janet then found him open to his suggestions, and got him to tell the cause of the trouble. This, it appears, was an act of infidelity to his wife while on his travels, which so preyed upon his mind that he thought himself damned and given over to the devil. Janet combated the exaggerated idea, conquered it, and cured the patient. Only a very skilful psychologist could hope to treat such a case successfully. Some years before I knew anything of hypnotism I attended a gentleman whose remorse took a similar form. His ending was tragic, for he committed suicide.*

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patient. Some such patients seem to require not only re-education as practised by Vittoz of Lausanne, but to be born again. I have known cases where disaster and financial ruin have brought about cure after all the doctors had failed, because the patient has had to follow Abernethy's advice to earn a shilling a day and live on it. There is no greater satisfaction than that derived from renewing a broken life and restoring a working member of society to usefulness, but I advise young practitioners taking up psychotherapy to be on their guard against psychic parasites and moral vampires. One of the points cleverly insisted upon by Mrs. Eddy is the throwing of the onus of failure to cure on the patient instead of on the 'healer.'

* Janet's method in these cases reminds one of that advocated by Van Helmont in the seventeenth century, when he wrote, 'Dropsy is not due to an organic lesion of the liver, but to the anger of the renal Archeus, who has lost his temper and refuses to work. One way of reducing him to order is to terrify him, and this may be done by tying a snake round the patient's waist and applying live toads to the region of the kidneys' (Withington's 'Medical History from the Earliest Times,' p. 308, London, 1894). But the modern physician only pretends to believe in the malignant devil, and casts him out by suggestions instead of loathly reptiles.

In various small surgical procedures, such as lancing whitlows, opening abscesses, etc., I have found hypnotism a useful anæsthetic; and it is evident that in certain operations in which chloroform is inadmissible, either from the condition of the patient or from the locality of the operation, hypnotism may be a valuable substitute.

It has been used in this way at the Paris hospitals, and notably in a case of ovariotomy at the Hôtel Dieu.

There is no doubt about the value of suggestion after surgical operations in relieving pain, procuring sleep, and promoting convalescence. I believe hypnotic suggestion will often be found to fill as beneficent a rôle after operations as anæsthetics have done during them.

Creed finds hypnotism very useful to relieve pain and prevent spasm after fractures and other accidents. He has trained some of his patients so that they can throw themselves into a state of hypnotic anæsthesia by using a prearranged signal. For instance, a gentleman let a quantity of 'Chatterton's Compound,' a substance more destructive than molten sealing-wax, fall on his hand. He immediately put the index-finger of his left hand to his mouth, which was the signal agreed upon, and a state of analgesia at once followed. The patient did not lose consciousness or become in any way affected save that he felt no pain. Recovery from this severe injury was rapid and painless. In dressing surgical wounds Creed finds he can induce local anæsthesia by suggestion, without other hypnotic effect, so that the patient goes on talking rationally all the time (*loc. cit.*, p. 7). I have also seen several cases of this kind.*

* The following extracts from a letter from a highly respected country practitioner, Dr. Hoskins, of Masterton, New Zealand, are, I think, worthy of consideration: 'In February and March last I made a trip over to study hypnotic suggestion in Sydney, under Dr. Creed, who has taken the matter in hand after due inquiry. I have certainly been greatly astonished at the results obtained in my cases. . . . I have never yet touched a case which I have not enormously benefited, far and away more than I could do by ordinary treatment. . . . I very much regret that I had not taken the subject up years ago. But, like the rest of our profession, I was prone to believe there was a good deal of low-down

It may be objected that it is dangerous to suppress pain, which is Nature's danger-signal to call attention to the injured organ. This is only true to a limited extent, and one need not go on waving the danger-signal indefinitely. The amount of pain is generally far in excess of such requirement, and its alleviation is one of the practitioner's most urgent functions. Fortunate is the patient who can have this effected without opiates or other anodyne drugs.

I have tried the effect of suggestion on five or six patients who were about to make long sea-voyages. In one of these the effect was very striking, for, though the sea was rough, the lady, for the first time in her life, was free from sickness. In two other cases there was great improvement compared with previous experiences. In every case the result justified the trial of the remedy. Liébeault, Bérillon, Farez, Osgood, Gorodichize, and other physicians have also used hypnotic suggestion successfully against *mal de mer* (*Revue de l'Hypnotisme*, 1896, 1905). Milne Bramwell had remarkable success in two cases (*op. cit.*, p. 262), and generally the consensus of opinion as to the efficacy of hypnotic suggestion in this troublesome disorder is very striking. Osgood reports

charlatanism about it. After reading Dr. Creed's address to the N.S.W. branch of the B.M.A., of which he has been twice president, I communicated with him, and went across to see him, and I have been easily able to prove personally nearly all I saw there.' Another New Zealand practitioner, Dr. James Boyd, F.R.C.S. Edin., has kindly sent me a report of a recent case of his (*New Zealand Medical Journal*, November, 1912). The patient, a man of sixty, was buried while at work by a heavy fall of earth. He was dug out, and treated at the hospital for some weeks. There was no fracture or dislocation, but pain and inability to walk caused by sacro-iliac strain. He was unable to work, sit, stoop, or lace his boots, and his nerves were giving way under the strain. As no progress was made after sixteen weeks, Dr. Boyd hypnotized him, and he became somnambulic at once. Suggestions were made and the patient awakened, the whole operation taking five minutes. All the pains and disabilities disappeared as if by magic, and did not return. The treatment was repeated on four consecutive days, and the cure is permanent. The change in appearance from that of a prematurely broken-down old man racked with pain to that of a smart, upright middle-aged one, was, to say the least, remarkable, adds Dr. Boyd. The patient was sure that a new and wonderful drug had been injected.

four cases of chronic eczema which he cured by suggestion, and one remarkable case of chronic dermatitis of exceptional severity after frost-bite. I have had remarkable success in several severe cases of pruritus, general and local, and Bramwell reports similar results. One of my patients was a lady of sixty, who had suffered tortures for years, and, being wealthy, had tried many kinds of treatment. Though but slightly hypnotizable, she soon responded to suggestion and was quite cured.

The casual and careless application of hypnotic suggestion will be no test of its value, and handing it over to unscientific persons will certainly end in disaster.

If medical men will employ the Nancy method of treatment in their ordinary practice, they will find it a very useful auxiliary in many trying, painful, and tedious cases.

For instance, in two cases of myxœdema I have used hypnotism to assist specific treatment by thyroid gland extract. The result was most satisfactory, for the symptoms, especially the mental ones, were speedily controlled by suggestion, while the medicine was working on the cause.

Dr. Douglas Bryan has published some notes on interesting cases occurring in his practice. He concludes his article with these words: ' To those medical men who have not given hypnotic suggestion a trial the above cases will read almost like fiction; yet it is open to all medical men to give hypnotism a fair trial, and I am confident that, if such be the case, they will very soon be able to quote cases quite as interesting and as satisfactory as the two I have described.'*

By expressing this opinion I have aroused some opposition; for there are those who think that, besides damaging the patient's health, the practice of hypnotism would ruin the doctor's pocket and reputation, since he might become the prey of designing adventurers and the victim of all kinds of charges and blackmail. I do not suppose that the most enthusiastic hypnotist would advise

* *General Practitioner*, December 15, 1906.

the practitioner to hypnotize his patients recklessly and promiscuously; on the contrary, the more experienced he is, the greater caution will he exercise. But probably every medical man has many patients who would very much prefer twenty minutes' somnolence in an easy chair as treatment for neuralgia to a course of medicine, and others on whom the resources of ordinary treatment have been employed in vain.

It is well to understand that the Nancy method of hypnotization acts on the central nervous system as a brain calmative, and that its object is the production of a state analogous to natural sleep by imitation of natural processes, and is thus a wooing of repose. The condition obtained is characterized by increased suggestibility, and it is through this the treatment works. The method adopted by Charcot and his imitators to obtain catalepsy by causing a violent and sudden sensory impression—by sounding a gong or flashing a bright light—acts in a totally different way, and induces a state analogous to that produced in waking moments by sudden fright or shock, which paralyzes and transfixes with terror. It is the difference in method shown by two nurses, one of whom quiets her charge by gentle persuasion, while the other prevents her from crying by threats of the police-man. Both children are kept quiet, but how different will be the after-effect of the two methods!

Liébeault, whose wisdom I learn to appreciate more and more, used to say: 'Il faut dominer vos malades.' This domination may be induced by love or fear, gentleness or brusqueness, and it applies not only to the use of hypnotism, but to all our relationship with patients. The fantastic and nasty theory of some Freudians that the patient falls in love with the hypnotizer is only referred to here to be scouted. Some of the best results I have heard of have been obtained by women doctors practising on elderly members of their own sex. A very strong case is, it appears to me, weakened and made offensive by such a misuse of language.

The patient's mood may vary with consequent change of effect. For instance, I treated Miss C—— in 1905 for neurasthenia with characteristic symptoms, including constipation, insomnia, headache, mental depression, and irritability, etc. A month's treatment worked wonders. She went abroad, married, and had a son. Domestic worries and other causes brought on a return of the disease, and in 1911 her friends induced her to consult me again. I could see that she was antagonistic and hopeless, and, though she was as hypnotizable as before—first degree—she got no better, and after two or three weeks I gave her up. She went in for all sorts of treatment without result, and at last, in 1913, wrote to me asking me to take her in hand once more, and saying that this time, as in 1905, she would, she was sure, respond to my suggestions. So we tried again, and though she was very much worse than before—being reduced to almost a skeleton, and completely sleepless without large doses of bromides or veronal—she rapidly improved, appetite and natural sleep were regained, and she put on ten pounds weight in three weeks. I need hardly say that the difference the patient's attitude makes to the sensitive physician's comfort is enormous.

Dr. Constance Long says: 'As a good bedside manner is expected of the doctor and helps towards the recovery of the patient, so a good in-bed manner helps the doctor, and it is the duty of the patient to cultivate it.'

There is an objection urged against hypnotic treatment—namely, that its effects are temporary, and that when a relapse occurs hypnotism will not again prove even palliative. The exact reverse is the truth. A patient who has been once relieved by hypnotic treatment is from that very cause a particularly good subject for future treatment by the same means. In diseases where the influence of hypnotism can only be temporary and palliative, as in locomotor ataxy and cancer, it will be found to relieve the pains more quickly and surely after six months than it did at first.

It is not easy to understand what foundation there is for many statements made about hypnotism. Most of these stories probably date from the time when mesmerism was extensively practised by ignorant and credulous persons, and others are perhaps founded on the experiences of professional magnetizers who have not been careful as to their method nor too scrupulous in their aims. I have on two or three occasions seen the induction of hypnotism for medical purposes actuate an attack in an epileptic subject, and I have also on more than one occasion seen it threaten to develop an access of hysteria in a subject in whom that neurosis was latent. But in nearly all cases it is easy to control any untoward symptoms by calming suggestions, or, if these fail, to awake the patient and discontinue further proceedings for the time. I think there is no doubt but that hypnotism determines the manifestation of latent emotional states—in the same way as chloroform—and this is a reason for insisting on its very careful handling. I have only seen one class of willing patients in whom hypnotism seemed rather to produce an aggravation of the symptoms—cases of what Dr. Whittle calls congestive neurasthenia. In two cases of the kind which came under my observation, I began by adopting the course recommended by Dr. Whittle, and applied three leeches behind the ears to relieve the urgent congestion. This procedure greatly relieved the head symptoms, and I then induced hypnosis with great facility and considerable advantage. The patient should feel refreshed and invigorated after the operation, and if this result is not observed, but lassitude should prevail in spite of suggestions to the contrary, I think it may be taken as a sign that the treatment is counter-indicated. I have only met with one case of the kind in my own practice, but I have heard of a few others.

My friend Colonel Neilson, late Director-General of the Army Medical Department, Canada, tells me that the thing which first made him investigate hypnotism was seeing the effect of the treatment on a bugler belonging

to his regiment, who was in hospital and given up as a hopeless case of phthisis pulmonalis. He hypnotized the man,and suggested quiet sleep, freedom from cough, and good appetite. The patient was only affected to the second degree, but the suggestions immediately began to tell: the exhausting, ineffectual cough diminished, the appetite improved, and the man slept well. In six weeks he was able to leave the hospital and return to duty. The man was never influenced beyond the second degree. One would, of course, like to have the physical signs and points of diagnosis thoroughly described in such a case, as I am sure Dr. Neilson would not maintain that the processes set in motion by hypnotic suggestion can restore broken-down lung-tissue.*

The late Dr. Myers (*Practitioner*, vol. i., 1890, p. 201) described a case of acute pneumonia he saw treated by Bernheim in the hospital at Nancy. The man had the physical signs of congestion of the bases of the lungs, and was in a state of high fever and delirium. He at first refused to be hypnotized, but eventually gave his consent, and Dr. Bernheim sent him to sleep for five hours. The man awoke refreshed and free from pain and delirium, but the physical signs remained unaltered. A medical friend of mine, suffering from pleurisy with high fever and much pain, induced a colleague to hypnotize him, with the result that he experienced almost immediate relief, and, though the disease ran its usual course, there was but little subsequent pain. I suffered much myself

* The following extracts from a letter received from Dr. Neilson will perhaps be of interest to the reader. Writing from Kingston, Ontario, he says: 'Military practice offers but a few opportunities of practising hypnotism, but so far I have applied it in about 100 cases . . . in eight or ten with brilliant success, in thirty or forty with fair success, and in the remainder with little or no result. The best results were obtained in cases of female derangements, muscular rheumatism, functional dyspepsia, constipation, insomnia, chronic pulmonary complaints, and dipsomania. Of the last named I have treated five cases and have obtained two cures—*i.e.*, the patients have remained total abstainers, in one case twenty and in the other fourteen months, without any sign of a relapse.'

from sleeplessness, pain, and restlessness, after a severe surgical operation in 1904, and my friend Dr. Giglioli of Florence, who was staying with me, kindly hypnotized me a few times. I was not a very good subject, but his suggestions as to sleep and ease were completely successful, and tided me over a difficult time.

The naïveté of some people who use things without knowing their nature reminds one of Molière's bourgeois gentleman, who was surprised to find that he had been talking prose all his life.* Among the medical men who have come to watch some of my cases was a gentleman who seemed much struck at seeing the method I adopted with a rather refractory subject. I held his hand and stroked his forehead, while at the same time suggesting the symptoms of sleep. The gentleman told me afterwards the reason why he was so interested. It appears that he had a few months previously been in attendance on a very severe and protracted case of delirium tremens. The patient could get no sleep, and the doctor was afraid of death from exhaustion. On the third evening he resolved to make a strong effort to produce sleep, and, if necessary, to sit up all night with the patient. He told the man that he would not leave him until he slept, and, sitting down by the bedside, he took his hand in one of his own, and with the other gently stroked the forehead. At the same time he talked quietly and reassuringly to him. In less than half an hour he was rewarded by seeing the restlessness entirely cease and the man drop off into a quiet sleep. That sleep, the doctor told me, lasted fourteen hours, and the patient awoke out of it weak, but cured. Manipulation about the head has in many persons

* Forel is very trenchant in his remarks on Professor Dubois, of Berne, who has written a diatribe against hypnotism, though Forel points out his success in practice chiefly depends upon the unacknowledged use of hypnotic suggestion. Van Renterghem, one of Liébeault's most distinguished pupils, and a most loyal admirer of our master, is equally outspoken in his Introduction to Dr. Hilger's book. I had the pleasure of hearing these doughty antagonists engage one another at the International Congress of Psychology at Amsterdam, 1909.

a most soporific effect, and several persons have told me that they always become drowsy under their barbers' hands.

It is said by Liébeault, on the authority of several writers,* that persons in the hypnotic state, whether it be induced spontaneously or by external means, are able to ingest without evil results much larger doses of poisons than can be taken in the normal condition, and that the bites of venomous serpents are very much less likely to prove fatal than in the waking state.†

The action of hypnotism here is probably similar to that exerted by chloral in the treatment of tetanus, and of large quantities of alcohol as a remedy for snake-bites. The excitability of the nerve centres is controlled, and excessive and exhausting discharge prevented, until the poison has been eliminated. I should imagine that hypnotic treatment is likely to prove useful in the treatment of tetanus and other spasmodic diseases depending on increased reflex excitability of the brain or spinal cord —not, be it understood, to the neglect of other treatment, but as an auxiliary.

To show what suggestion may do, I will cite the case of a medical friend who asked me to hypnotize him and

* *Op. cit.*, p. 222.

† Several medical men who were present at a recent performance assure me that they saw somnambulic subjects swallow as much as 80 grains of quinine in one dose, and that they watched for effects and found none. The same public performer made his unfortunate subjects drink large and almost poisonous quantities of paraffin oil, kerosene, and other nauseous compounds, without producing any result. This application of suggestion has its practical side. Forel tells how he had to prescribe castor oil for his children, and they much disliked it. By hypnotic suggestion he made them quite enjoy it. Hilger has often used hypnotic suggestion to remove patients' dislike to desirable articles of food—*e.g.*, milk; and to induce them to accept a necessary diet cheerfully—*e.g.*, in diabetes. I had practical experience of such a case of suggestion a few years ago, when I found myself kept awake at night if I indulged in coffee after dinner. Being fond of coffee, I found this very annoying, and I got my friend Mr. Fox Pitt, the eminent psychologist, to hypnotize me a few times and remove the idea. The result was satisfactory, for I have since been able to enjoy my coffee and my good nights. Of course, I believed in the treatment, and was a good patient, though only slightly hypnotizable.

make suggestions about retaining his water. He had an organic stricture, and felt the greatest dread of a catheter. I found him hypnotizable to the second degree, and I made suggestions that he should be able to retain his water for four or five hours during the day and all night. After three or four sittings he assured me that, instead of having a call nearly every hour day and night, he is now able to go as long as most people. In this case I doubt if the treatment has not done more harm than good, for by relieving the symptoms it has enabled him to postpone the surgical interference which is urgently called for. I have frequently been able in the same way to relieve the dysuria of patients suffering from Bright's disease or diabetes, and sometimes even that due to prostatic enlargement.

Dr. Kingsbury, late of Blackpool, has reported in the *British Medical Journal* and in his book a remarkable case of painless and rapid delivery in the hypnotic state. The patient, a young girl under fifteen, was hypnotized several times previous to the confinement, and was most deeply influenced.* Dr. Douglas Bryan, of Leicester, reports a similar case in full detail.† Dr. Milne Bramwell has brought the surgical use of hypnotism prominently before the profession, and operations were frequently performed at Leeds with him as hypnotic anæsthetist. I need hardly remind the reader that Esdaile, Presidency Surgeon at Calcutta, performed many capital operations under mesmeric anæsthesia sixty years ago.

Milne Bramwell excited great interest by showing the profession at Leeds how easy it was for him to hypnotize subjects at a distance by telegram or letter.

* Dr. Marie Dobrovolsky has described in the *Revue de l'Hypnotisme* for March, 1891, a series of eight confinements in which she has employed hypnotic suggestion. The pains were either greatly diminished or abolished in all the cases, and that without interfering with the uterine contractions. In several of the cases only a slight hypnotic sleep was induced. In every instance the patient was previously hypnotized several times preparatory to the lying-in.

† *General Practitioner*, December 15, 1906.

One patient went into a deep trance immediately she handed the dentist a note, and in this state had several teeth painlessly extracted. Suggestion, of course, is the explanation of this result. On some occasions, where it has been necessary to break off the treatment prematurely, or where it has been advisable to continue it over long periods of time, I have found the following plan very efficacious: The patient is given a paper on which are drawn several lines and figures, and he is told that once a week, or as often as is necessary, he is to lie down in some place where he can be quiet, and hold the paper in his hand at a convenient distance from his eyes. After looking at it a few seconds with the desire and expectation of sleep, he will pass into the stage of hypnosis he ordinarily assumes, and in that state the memory of the suggestions previously made will recur to his mind, and he will feel them producing their usual effect. It is important to remember to tell the patient that this course is only to be adopted at the prescribed times, and that, in fact, it is a medical prescription.* A paper is not always necessary: a patient whom I am in the habit of some-

* The following extract from a letter received from a patient who was for some months under my treatment explains the working of this method. The gentleman was a dipsomaniac of the very worst type, and after keeping sober for seven months he left England and soon relapsed. He then went to stay in a retreat where no treatment was employed but enforced abstention; and as he told me that he found it much more difficult to abstain without hypnotism than with it, I adopted this plan. 'Doing as you suggested,' he writes, 'I made the first attempt last week, and it was completely successful. I went off at once, bearing in mind that I was to awake in ten minutes. I took the time, and found that I awoke to the minute. All your suggestions came back and repeated themselves, as it were, frequently. I could quite have believed that you were there making them, and they were spoken in your voice.' Colonel Neilson first caused me to try this method. He practised it successfully in the case of a soldier, whom he cured of confirmed drunkenness of twenty years' standing.

This is, of course, quite a different thing to 'absent treatment' as understood by Christian scientists and mind healers. I recently received a letter from a gentleman of Colorado Springs, U.S.A., suffering from tabes dorsalis, asking me to treat him mentally, and requesting to know my fee, and if I guaranteed a cure. The public still needs a good deal of educating in medical matters!

times hypnotizing by gentle stroking of his forehead tells me that he now frequently sends himself to sleep at night by imitating on himself this simple process.

I have been successful in a good many cases of neurasthenia brought on from overwork, anxiety, or dissipation, and also in the depressed nervous condition sometimes seen to persist after influenza, typhoid, and other fevers.

Sir Clifford Allbutt says ('Gulstonian Lectures,' 1884) the neurasthenic patient has no reserve of energy. He has exhausted it perhaps in work, but frequently in dissipation, and it has never reaccumulated. He lives, as it were, from hand to mouth on the day's supply, and a precarious existence it is. In such cases sleeplessness is a very prominent symptom; and even when sleep is obtained it will generally be found that it is of an unrefreshing character, so that the patient wakes up saying he is more tired than when he went to bed. Theoretically, hypnotism ought to work wonders in these cases, and as a matter of fact the treatment is often most successful in them (*vide* p. 227 *et seq.*).

I have twice been called in to see what hypnotism could do to procure euthanasia. In one case the medical man in attendance was afraid to give narcotics on account of the state of the heart, and in the other the patient begged that nothing should be given to her to make her unconscious. Hypnotism soothed their last hours to a remarkable extent, and afforded the greatest comfort to the relatives. It should certainly be thought of in cases where the patient's last hours are embittered by excessive irritability and restlessness, and there are reasons against giving drugs.

Van Renterghem gets more cases of neurasthenia than of any other disease in his clinique at Amsterdam, and reports having treated 118 cases during the four years from 1893 to 1897. Of these, eighty-six were men and thirty-two women. He states that thirty-one were cured and sixty-one were much benefited by hypnotic treatment—a very good showing in such an intractable disease. Neuras-

thenia, Savill and other authorities teach, depends upon so many causes that it does not do to treat every patient alike. *Tolle causam* is as important an axiom here as in any class of case. If the condition depend on central nervous causes, such as mental shock, overwork, excessive venery, or if it follows debilitating disease, like typhoid fever or influenza, I believe hypnotism is the best treatment, and that it alone will cure the patient *cito et jucunde*. If the neurasthenia is the result of mal-assimilation and fermentation of food, suggestion will help to promote eupepsia; and whatever the cause, it will, if the patient is hypnotizable, relieve the mental gloom which weighs him down, and thus hasten his recovery. Neurasthenic patients are apt to be difficult. Being self-centred and of low vitality, it is not easy to gain their attention; and they are, as we all know, inclined to be sceptical, hopeless and averse to giving treatment a fair trial. They constitute a large proportion of those patients who enter the physician's consulting-room with the announcement that he is the thirtieth or fortieth doctor they have consulted, and that no one can do them any good. I need hardly say that each failure has acted as a strong counter-suggestion to cure, and that the last state of such people is likely to be worse than the first. Success in the treatment of these cases depends a great deal on the doctor being able to inspire confidence and to employ suggestion, whether with or without hypnotism.

Neurasthenia is a very interesting study. A few years ago it was hardly recognized as a pathological entity, and Sir W. Gowers dismissed it in a few paragraphs in the first edition (1888) of his great work on nervous diseases. Now there is a mass of literature on the subject, and half our patients seem to be neurasthenic, more or less. Its successful treatment by hypnotism well illustrates the power of suggestion in diseases of nutrition and function. As the late Dr. Savill and other writers show, a leading feature of neurasthenia is disturbance of digestion, with excessive fermentation of food and dilatation of the

stomach and colon: a vicious circle is thus set up of auto-intoxication and nervous atony. Most authorities think the primary fault lies in the brain, and there is no doubt about this being the case in neurasthenia following injury or mental shock.* The indications for treatment are restoration of sleep, which is nearly always impaired, and of tone to the digestive organs. This may be done in many cases by careful dieting and the use of electricity; but if the central nervous system is at fault, the disease is best attacked through it, and here hypnotism proves a most valuable ally. It makes an appeal to the head office direct, instead of addressing the departments in detail. The sympathetic nervous system is largely responsible for most of the phenomena of hysteria and of many of those of neurasthenia and allied conditions. It is not under the control of the ordinary will or consciousness, but can be profoundly influenced in the hypnotic and allied states, as is seen by the occasional production of stigmata in religious ecstasy and of inflammation of the skin by suggestion in deep hypnosis. It is this action on the sympathetic system—the brain of systemic consciousness and organic life—through the highest cortical centres, constituting the ultimate court of appeal, that enables us to effect cures of functional and relief of organic troubles by suggestion. In a successful case it is very striking to see how the objective symptoms, such as distension of the stomach and mucous colitis, rapidly improve, together with the subjective ones of mental depression, painful sensations, etc. Food is properly digested, and fermentation, with its resulting auto-intoxication, is arrested. I relate later on several cases from my own and other physicians' practices to illustrate these points, and I strongly advocate the use of hypnotism in the early treatment of the disease before the patient's constitution is seriously affected, before he has lost confidence in doctors and remedies, and before he has become hypochondriacal

* 'Dyspepsies Nerveuses et Neurasthénie,' par Dr. Paul Glatz Bale et Géneve, 1898.

and hopeless. There is only one serious drawback to hypnotic treatment in neurasthenia—inability to fix the attention is one of the characteristics of the disease, and that and a low state of vitality render hypnosis difficult. Sometimes one meets with very susceptible neurasthenic subjects, and in such cases I look upon hypnotism as the ideal remedy. During hypnotic rest repair and recuperation of the weakened organs proceed rapidly, physiological rest of the damaged central nervous system is assured, and a short cut to complete cure is within our reach. But, as Savill points out, neurasthenia is a very chronic disease, and requires time for cure. He gives a month's treatment for every year it has lasted. Hypnotic treatment is apt to be so brilliantly successful in its first effects in good cases that both patient and doctor are likely to be rendered unduly confident. I had this experience many times formerly, and found that disappointment and reaction often followed these exaggerated expectations. The first thing to do is to build up a strong reserve of nerve force, for the patient has been living from hand to mouth, as it were, for months or years. This takes time; and we must insist on the essentials of rest, careful dietary, open air, and proper exercise being maintained. The restoration of natural sleep and the establishment of natural action of the bowels are among the first-fruits of successful hypnotic suggestion.*

The following case presents many points of interest In 1893 an American working man came to me with a note from a well-known omniscient editor, and this was his story: He was thirty years of age, and had been for ten years a labourer at the shipyards at Boston. He had led a dissipated life, but was very strong and well until he had a bad attack of influenza in 1892. This left him so weak that he could not go back to heavy work, and if he

* *Vide* special number of the *Practitioner* (January, 1912) on Neurasthenia. Many well-known specialists contributed articles, and I discussed the merits of hypnotism, and, I think, proved my points.

attempted to stoop, there was severe pain in the lumbar muscles. Ordinary remedies did not set him on his legs, so he studied his case for himself, and found in a medical work on influenza in the public library in Boston laudatory references to hypnotism in the treatment of the sequelæ of the disease, and the statement that the system was practised at Nancy, in France. Without further inquiry he sold his effects, and with the money took a steerage passage to Havre. Thence he went to Paris, where he found he had spent all his money and was still a long way from his goal. He went to the American Consul, who advised him to come to London, and gave him money for his fare. Arriving in London, he wrote to the omniscient gentleman referred to, who is as well known in America as in England, and he referred him to me. I hypnotized him, and he became at once somnambulic. I let him sleep for several hours, and suggested increased vitality and freedom from pain in the back. These suggestions, combined with movements and massage, were repeated five or six times during the next ten days, and then the patient announced himself as cured. He set off to look for work, and found it as a dock labourer. He came to tell me that he could work all day, carrying heavier loads than most of his mates, and that he was saving up his wages so as to get back as soon as possible to his own country.

No doubt the trouble and expense this patient was put to helped to get him into a suitable frame of mind for cure from the treatment he had set his heart upon. If he had only known it, there were at the time at least two able physicians practising hypnotism in Boston, and it would be interesting to know if the treatment would have been equally successful if he had found it at his door. I think it would, for he was a good subject, and one was able to drive suggestion well home. This strong, self-sufficien working man possessed the spirit of the pilgrims of the Middle Ages, and no doubt the grotto at Lourdes claims many such votaries, who return from a pilgrimage

there cured from their diseases. Some, alas! remain uncured.

Asthma is another disease, like neurasthenia, very intractable by ordinary drug treatment, and yet often cured by outside remedies. Dr. Francis cures a large proportion of his cases by cauterizing the nasal septum. I have known some very bad cases cured by Ling's Swedish exercises, and others by putting the patient on rigorous Salisbury diet. Other cases, again, have yielded to vaccine therapy—we cannot have too many strings to our therapeutic bow. I have cured several cases by hypnotic suggestion, as exemplified later on. Asthma is one of the diseases for which hypnotism should always be thought of. Forel relates the cure of a very bad case where there was considerable resulting emphysema of the lungs and dilatation of the heart. Prevention of attacks soon brought about structural repair, as shown by the physical signs.

The profession is indebted to Dr. Milne Bramwell for much information concerning the therapeutic uses of hypnotism. He has frequently demonstrated its availability as an anæsthetic in surgery, and he has brought an exhaustless fund of patience to bear on the most obstinate cases. He has described a case of pruritus vulvæ which had resisted all attempts at hypnotization sixty-seven times, but he succeeded in inducing somnambulism the sixty-eighth time, and the patient was cured!*

* It comes as a surprise to me that, after his early insistence on the importance of getting as deep hypnosis as possible and his splendid perseverance in striving to this end, Dr. Bramwell should now attach little importance to hypnotism, and advocates treatment by suggestion alone (*vide* article by Dr. Maurice Wright in the *National Review*, August, 1910). Perhaps, as in the case of Dubois, his reputation and personality suffice. I confess I still need the aid of hypnotism. Dr. H. T. Hurst has made many researches in war and other neuroses which he has embodied in his Seale Hayne Neurological Studies. He found systematic suggestion so successful without hypnosis that he practically discarded it. He holds that functional diseases can only be successfully treated by psycho-therapeutic methods, and insists that in all organic disease there is a functional or hysterical element which is reached by mental treatment (*vide* Dr. Allan's chapter in this book).

He showed at Leeds a case of aphemia with paresis of the legs, which had lasted for three years, which he had cured in a few days by hypnotism: a case of hyperidrosis existent in a girl since infancy, with a patch of skin on the left wrist so affected that the perspiration was continually dripping from it to the ground. She was cured almost immediately. A case of intercostal neuralgia in a boy was cured in three sittings. In four cases of Ménière's disease he found great improvement was brought about in the hearing, and the vertigo was almost entirely removed. Dr. Bramwell tells me that he has never seen any harm done by judicious employment of hypnotism, and this statement, coming from him, must be acknowledged to carry great weight.

A somewhat similar case of hyperidrosis is reported by Dr. A. Charpentier.* The patient, a young man of twenty, had suffered from excessive sweating of the hands for five years, apparently dating from a mental shock. Intermittent to begin with, it had for two years been continuous, and was so abundant that when the hands were held down the perspiration flowed from the finger-tips as from a filter. Many forms of treatment had been tried, including astringents, ergotine, atropine, scarification, electricity, but without success, and at last Dr. Charpentier bethought himself of hypnotism. After some difficulty the patient became a good subject, and completely somnambulic. Improvement immediately resulted from suggestions directed to the central origin of the trouble, and the young man was shown cured at a meeting of the French Société d'Hypnologie et de Psychologie.

So far I have only attempted to treat one case of hyperidrosis by suggestion. The patient was a young lady who came under treatment in 1899 for severe and almost continuous frontal headache. This was speedily cured by suggestion, though it had for a long time resisted all the usual remedies, and she was only slightly hypnotizable.

* *Revue de l'Hypnotisme*, January, 1900.

She then told me of her other trouble—excessive perspiration of the brows and nose, brought on especially by any mental emotion, and a source of endless distress and annoyance to her.

Probably a profound degree of hypnosis is necessary before suggestion has sufficient influence over the central nervous system to control such a local condition. I never could get more than a slight torpor and drowsiness with this patient, and the condition underwent no change.

The medical world is familiar with instances where a treatment which has been highly praised in some quarters has failed to produce good results when tried elsewhere. Apostoli's method of applying electricity in uterine fibroids, and Charcot's suspension treatment for locomotor ataxy, are cases in point. Neglect of apparently trivial technicalities may explain some of these discrepancies.

Practitioners of the Nancy school all over the world are agreed as to the efficacy of hypnotic suggestion, and of the absolute importance of observing points of detail. Bernheim asserts, and Forel agrees with him, that no one is entitled to speak with authority on the subject until he succeeds in hypnotizing at least 80 per cent. of the hospital patients on whom he tries the treatment. Hypnotic suggestion is a psychical treatment, and to use it successfully demands tact, judgment, medical knowledge, and knowledge of one's patient, or, in the words of a recent writer, a firm will, unlimited patience, and a calm temperament. To these Forel adds enthusiasm and resourcefulness.

NOTE.—The experience of a scientific and critical friend, Dr. B——, whom I have frequently hypnotized, is interesting. He is a healthy man of forty-five, of dark complexion and lymphatic temperament, somewhat hypochondriacal, and a clever and successful practitioner. He is a good subject, and is sometimes affected to the third, and sometimes only to the first, degree of hypnosis.

When told that he cannot open his eyes, he makes no attempt to do so unless strongly urged to try, when he proceeds in the ineffectual manner already described. With much effort he is generally able to move his arm, in spite of my prohibition, but the force employed is evidently entirely out of proportion to the

result achieved. In the hypnotic state he feels absolutely tranquil and at rest, and when exhorted to exert himself he reflects: 'Of course I can do any of these things if I only try, but I am not going to disturb myself by trying.' When told that he will open his eyes and be wide awake when I count fifteen, he makes up his mind not to comply, and yet when I reach fifteen he cannot help becoming wide awake. After removing a real pain, such as occipital neuralgia, I have frequently, in the same subject, induced a pain localized by suggestion—*e.g.*, in the eye or forefinger. Dr. B—— frequently feels a sensation of numbness, heaviness, and 'pins and needles' in a limb for some minutes after I have told him it is fixed and immovable. It is interesting to note that having been frequently hypnotized does not prevent him from successfully operating on others; and he often uses the Nancy method in his practice. In this case and all others I find the patient's co-operation is absolutely necessary to success, and I have always failed to produce any effect upon him and others when I have either asked them to resist, or when there has been some disturbing emotional element present. This is an important fact in face of the statement sometimes advanced, that after being hypnotized the patient is unable to resist subsequent attempts. I speak here only of medical hypnotism. Though I have failed to find the inhalation of chloroform of much use in inducing hypnosis in the twenty or thirty intractable cases where I have tried it, such has not been the experience of some other observers. Dr. Abdon Sanchez Herrero, Professor of Clinical Medicine in the University of Valladolid, contributed to the Congress a paper on 'Forced Hypnotization' (*Comptes Rendus*, p. 212). He, following up the experiments of Dr. Rifat, of Salonica, found that there is a short period during the inhalation of chloroform when the subject is as open to outside suggestion as in somnambulism, and this stage is, he says, at the end of the period of nervous excitement, and before that of delirium—a space of very short duration, sometimes only of a few seconds. Dr. Herrero experimented on six patients, whom he had previously found to be absolutely insusceptible to hypnotism after repeated and long-continued attempts. He failed in the first two cases owing, as he thinks, to allowing the favourable moment to pass; but in the other four he was successful in hitting upon the exact period of 'suggestibility.' To the first he suggested ready susceptibility to ordinary hypnotism the following day, and as a result the hitherto intractable patient was hypnotized by a few minutes' simple fixation of the eyes the next morning. He suggested to the other three patients daily increasing susceptibility to the action of chloroform, and finally the production of anæsthesia and unconsciousness without the drug. In each case he was successful within a week in reducing the quantity of chloroform to the vanishing-point, and in inducing what was practically hypnotic somnambulism by simple suggestion. Dr. Herrero has continued his researches, and feels himself justified in asserting that in chloroform we have an aid to hypnosis which will enable us to hypnotize the most intractable cases, and he proposes it as an alternative to the terribly fatiguing and somewhat repulsive method pursued by Dr. A. Voisin, at the Salpêtrière, in cases of insanity. This paper throws a light on the induction of anæsthesia in Mr. Braine's case (quoted on p. 10), and also on Bern-

heim's assertion that he finds the action of chloroform greatly reinforced by suggestions made whilst administering the anæsthetic. On the other hand, Milne Bramwell says (*op. cit.*, p. 68) that he has not found chloroform or other anæsthetics helpful in inducing hypnosis.

Herrero, Von Schrenk-Notzing, Wetterstrand, and other authorities have made considerable use of chloroform for the purpose of quieting nervous excitement and breaking off the life of relation, and so favouring the induction of hypnosis. They express themselves as well pleased with their results. Dr. Van Velsen, of Brussels, tells me that he succeeded in hypnotizing a friend after giving him 10 grains of chloral whom he never could influence before, though he had made many attempts; subsequently the patient was susceptible without chloral, and became a somnambulist.

Dr. Barwise says: 'I have had no difficulty in hypnotizing patients taking bromide of potassium or chloral hydrate, and from some observations I made a year or two ago upon the action of cannabis indica in the treatment of sick headache, I was led to the conclusion that this drug predisposed to hypnosis, and a recent experience has removed all doubt of it' (*op. cit.*, p. 7). Dr. Farez has recently substituted somnoform for chloroform, as being equally efficacious and less dangerous.

I should here like to add a word of caution against regarding hypnotism as a panacea in every case of drunkenness. I am thoroughly convinced of the value of hypnotic suggestion as *an aid* to moral reform, and look forward to a time when it will be used in all retreats for inebriates and other reformative institutions; but I recognize its limits, and I know that its indiscriminate employment will only bring disappointment to the patients and discredit to the system.*

When we consider that hypnotism simply intensifies to a notable extent the influence of suggestion on the bodily functions and mental characteristics, we see how its curative scope is necessarily limited by pathological and other conditions, and how illogical it is to expect miracles in the way of moral reformation from it alone. Granted

* Canon Barnett told me years ago, *à propos* of a drunken woman he was interested in, that he thought I should reap disappointment unless I could bring about a change of heart in these patients. A change of outlook is at any rate necessary. Hypnotic suggestion undoubtedly very often enables us to effect the latter if not the former change. One of my patients tells me he abstains altogether from alcohol now because he finds the amount he can take without causing illness and disgrace is so small as to be not worth while.

the patient has preserved some degree of self-control, and has a strong desire to be cured, it is possible that success may result from the use of hypnotic suggestion, even when the surroundings continue unsatisfactory. Under such circumstances I know that publicans have been cured without leaving their business, and soldiers without quitting their regiment; but I regard these cases as exceptional, and in long-standing or inherited dipsomania removal from temptation is an essential condition of success.

It is important to bear in mind how drunkenness varies in degree and kind. Between the man who drinks to excess when occasion offers, and who cannot resist the solicitations of friends, and the dipsomaniac there is a great difference. Though the ordinary drunkard may become dipsomaniac, this is not usually the case. The drunkard is mad because he drinks; the dipsomaniac drinks because he is mad. Dipsomania is a form of impulsive insanity, which is nearly always inherited, and which manifests itself by uncontrollable fits, during which the patient is obviously insane. Dr. Ball, speaking of this disease, says: 'The prognosis is absolutely hopeless, especially when it depends on heredity, and is not due to acquired habit. Such patients are never cured, though the methods of treatment are as varied as they are numerous. . . . If there is any chance of safety for them, it lies only in their being placed under restraint for a prolonged period—I may say for an indefinitely prolonged period' (*op. cit.*, p. 797).

I have treated during the last twenty-five years over 300 cases of chronic alcoholism, and have found hypnotic suggestion has proved completely curative in about a third of these. This is a good result, considering that in no case was the patient confined to a retreat or kept away from his home or business for longer than a month. I only stipulated that for a specified time he must be under responsible supervision, and must lead a healthy and rational life. One generally found self-control was

rapidly regained, and it became safe to gradually give him more liberty. The immense gain of this treatment in suitable cases over that of confining patients in a retreat for twelve months—the least time the advocates of this system recommend—is apparent. Not only does the patient keep in touch with his family and business, but he is saved the demoralizing effects of a loafing and idle life. I know inebriate retreats are necessary, and many of them are admirably managed, but association with other drunkards cannot be beneficial, and it is difficult to find rational employment for all the inmates of a retreat for the better classes.* I should like to see every drunkard given the chance of speedy and pleasant cure by hypnotic suggestion under favourable conditions.† If it failed, I

* The Dalrymple Home, Rickmansworth, is one of the best-known and best-managed retreats in the country. Its report for 1899 states that, of the 518 men who had passed through it since it was opened, 169 are doing well. This proportion and mine may appear small alongside of systems which 'never' fail, or which claim to cure over 90 per cent. The explanation lies in the fact that our reports give a more accurate account of what happens. It is easy enough to coax a drunkard into sobriety for a few weeks, and then to claim him as a cure. In one well-known instance twelve drunkards were treated by a vaunted specific, and it was reported in three months, with great flourish of trumpets, that they had all been cured. Alas! I am informed that after twelve months every one of them had relapsed. Inebriates are generally emotional, and easily acted upon by their environment. Well fed, petted, flattered, the excitement of their new situation sufficed to keep them sober for a few weeks. But the object achieved by the advertisers, their attentions to the patients ceased, they were thrown on their own resources, and speedily resumed their old habits. It will be noticed in the accompanying table how many of my patients relapsed after three months, and I look on that as a somewhat critical period.

† Dr. Astley Cooper uses hypnotism and psycho-therapy in conjunction with all the other latest forms of treatment, re-educational and moral, in his excellent institution near Cockermouth, and he gives an interesting account of his experience in his recent book ('Pathological Inebriety,' 1913, with an Introduction by Sir David Ferrier, F.R.S.).

The failure of ordinary retreat treatment was commented on by Mr. Mead, Metropolitan magistrate at Marlborough Street Police Court, who said, 'Our experience of these homes is unfortunate, because we have not had a single successful case of reform of persons sent to them. So far as this court is concerned, the Act is an absolute failure' (*Times*, January 31, 1913).

So much for rate-supported institutions. Well-to-do patients

should consign him to an agricultural colony for inebriates, conducted on somewhat similar lines to those adopted at the excellent institution for epileptics at Chalfont. Work, discipline, and hygienic surroundings are the remedies for chronic alcoholism, as idleness, laxity of aim and principle, and unhealthy surroundings, are its principal causes. An unfortunate denizen of the slums once said that a bottle of whisky was the shortest way out of Sheffield.*

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go from one institution to another, and I have met several who have been in five or six. Some of those who have gone in with one vice have come out with half a dozen. The greatest care should be taken in choosing a home for an inebriate. Rational direction and occupation are at least as important as deprivation of drink.

* Increased experience confirms these ideas, and they are shared by my confrères who use hypnotism in all parts of the world. It is gratifying to find they are held by Dr. Creed, and that he has expressed them strongly in a report he was asked to draw up for the New South Wales Government. His position will perhaps enable him to put his theories into practical application.

The advertised cures for drunkenness largely depend for their success upon the careful use of suggestion, supplemented by drugs which seem to satisfy to some extent the craving for alcohol—*e.g.*, strychnine and atropine.

It is of practical interest to trace the subsequent life-history of some of these alcoholic patients:

Case 1 (1906) continues well, and has been for many years a moderate drinker. This is, of course, quite exceptional, and, in the main, I agree with Forel that it is 'utterly idiotic and harmful to attempt to convert a soaker into a moderate drinker.' Total abstinence is the only course, he says.

Case 2, when last heard of, in 1901, was reported as keeping well.

Case 4 emigrated to the Colonies, where he led an adventurous and most trying life, surrounded by temptations. He got cancer and came home to die in 1897, having had no relapse.

Case 25: This patient has had a few relapses, but none of a serious nature. His younger brother, treated in 1896, seems really and permanently cured, though his case appeared even more serious.

Case 38: This patient led an exemplary life for ten years and became an ardent temperance worker. His wife died, and two years afterwards he married, most unwisely, a young and frivolous girl. Disappointment broke his heart, and he practically committed suicide within three months of his marriage by shutting himself up in his room with a supply of spirits and drinking himself to death. This history shows how impossible it is to affirm that any drunkard is cured until he has died. 'Call no man happy until he is dead,' said Solon.

Cases 46 and 65 are keeping well, according to latest reports (1904-05).

Several of the failures here recorded have tried Keeley and other

I have embodied my views on this subject in a paper I read at the annual meeting of the British Medical Association at Nottingham in 1891, which is published in enlarged form by Messrs. Churchill; and I herewith (p. 240) reproduce a table from a paper I read at the International Congress on Psychology held at Munich in 1896.

Among the successful cases are certainly ten of real dipsomania. In nearly all cases I have seen partial or temporary success, and in many instances where there was relapse cure would, I think, have resulted had circumstances been more favourable. I have never seen hypnotism weaken the character where it has been properly used; but, on the contrary, it is interesting to note the almost invariable improvement in disposition which takes place under the influence of moral suggestions. It is my practice to make the suggestions in the direction of evoking the patient's own powers; and it would be manifestly wrong to introduce a personal element into the treatment, or to make the patient sober in order that he may please the hypnotist! But in many quarters that seems to be the idea of treatment, and in cases so treated I can well understand that when the personal influence of the hypnotist is removed the patient may relapse. I suggest: First, abhorrence of drink and its results; secondly, absence of craving for it; and, thirdly, increased self-control, so that if temptation does arise there may be power to resist it. If the patient is only slightly influenced, or if it is only necessary to slightly supplement the power of his unaided will, these suggestions are all one need make; but if he is a person of very weak character,

drug treatments, but in no case, as far as I have learnt, have they been permanently successful. In only one later case (that of a children's nurse sent to me in 1901) has a secret drug treatment been successful when hypnotism failed. This patient was a very good subject, but always expressed great fear of the process. She remained an abstainer for fourteen months after her first hypnotic treatment, and then had a relapse. I treated her again, and she remained sober for three months. Then she relapsed, and further treatment was a failure. It remains to be seen whether the drug treatment makes a better record in the end.

Case.	Sex.	Date.	Age.	Condition.	Nature of Surroundings.	Duration of Habit.	Degree of Hypnosis.	Result.
1	M.	Dec., 1888	43	Married, ex-captain	Favourable	3 years	3rd	Cure. No relapse
2	M.	Jan., 1889	34	Married, merchant	Favourable	3 years	2nd	Cure. One relapse in June, 1889
3	M.	Feb., 1890	30	Married, clerk in S. Africa	Unfavourable	2 years	4th	Relapse after 15 months
4	M.	Feb., 1890	35	Single, ex-officer	Unfavourable	17 years	6th	Cure. No relapse
5	M.	Feb., 1890	45	Married, artist	Unfavourable	Over 10 years	4th	Much benefited. Occasional outbreaks
6	M.	Mar., 1890	34	Married, country gentleman	Favourable (H)	7 years	3rd	Relapse after 7 months, but permanently cured now
7	F.	April, 1890	41	Wife of solicitor	Favourable	Over 5 years	4th	Relapse after temporary benefit
8	F.	May, 1890	40	Single, shop assistant	Unfavourable	Over 10 years	5th	Relapse after temporary benefit
9	M.	June, 1890	27	Single, tutor	Favourable (H)	3 years	1st	Relapse after temporary benefit
10	M.	June, 1890	60	Married, merchant	Unfavourable	Over 10 years	2nd	No effect
11	F.	Dec., 1890	40	Wife of clergyman	Favourable	7 years	1st	No effect
12	M.	Dec., 1890	42	Married, clergyman	Unfavourable	Over 10 years	2nd	Relapse after 3 months
13	M.	Feb., 1891	30	Married, merchant	Unfavourable (H)	4 years	6th	Apparently cured, but died after 6 months
14	M.	Mar., 1891	27	Single, country gentleman	Favourable (H)	5 years	3rd	Relapse after 8 months, but permanently benefited
15	F.	Sept., 1891	42	Wife of merchant	Unfavourable (H)	4 years	3rd	Cured
16	F.	Sept., 1891	28	Wife of naval officer	Favourable (H)	5 years	3rd	Much benefited
17	F.	Nov., 1891	32	Wife of clerk	Unfavourable	5 years	6th	Relapse after 3 months
18	F.	Nov., 1891	45	Wife of artisan	Unfavourable (H)	7 years	6th	Relapse after 3 months
19	M.	Nov., 1891	27	Single, surveyor	Favourable	3 years	4th	Relapse after temporary benefit
20	M.	Nov., 1891	36	Married, tradesman	Favourable (H)	7 years	2nd	Relapse after temporary benefit
21	F.	Nov., 1891	37	Married, dressmaker	Unfavourable	7 years	2nd	Relapse after temporary benefit
22	F.	Nov., 1891	24	Wife of clerk	Favourable (H)	3 years	4th	Relapse after temporary benefit
23	F.	Dec., 1891	47	Widow, housekeeper	Unfavourable (H)	7 years	5th	Relapse after 2 years
24	M.	Dec., 1891	54	Widower, gardener	Unfavourable	Over 10 years	6th	Relapse after 3 months

(H) means strongly marked heredity, and that several members of the family have suffered from chronic alcoholism.

Case.	Sex.	Date.	Age.	Condition.	Nature of Surroundings.	Duration of Habit.	Degree of Hypnosis.	Result.
25	M.	Dec., 1891	35	Married, brewer	Unfavourable (H)	7 years	4th	Has had two relapses, but is now doing well since 1 year
26	M.	Dec., 1891	40	Married, chemist	Unfavourable	3 years	5th	Cured
27	M.	Dec., 1891	40	Married, engineer	Unfavourable	4 years	1st	No effect
28	M.	Dec., 1891	32	Married, tutor	Favourable (H)	10 years	3rd	Relapse after 9 months
29	F.	Jan., 1892	43	Widow, servant	Favourable	2 years	5th	Cured. No relapse
30	M.	Jan., 1892	32	Single, country gentleman	Favourable (H)	4 years	3rd	Cured
31	M.	Jan., 1892	35	Married, merchant	Favourable (H)	20 years	4th	Cured
32	M.	June, 1892	40	Lawyer's clerk, single	Favourable	Over 10 years	4th	Several relapses, but has not relapsed now for years
33	F.	July, 1892	35	Cook, single	Favourable	Over 5 years	5th	Temporary improvement, but relapsed after 4 months
34	M.	Nov., 1892	30	Gentleman, single	Favourable	Over 5 years	3rd	No effect
35	F.	Nov., 1892	22	Servant, single	Unfavourable	5 years	5th	Relapse after 2 months
36	M.	Nov., 1892	36	Lawyer, single	Favourable	4 years	3rd	Relapse after 6 months
37	F.	Nov., 1892	35	Housekeeper, single	Favourable	3 years	6th	Relapse after a year
38	M.	Dec., 1892	35	Merchant, married	Favourable	7 years	2nd	Cure. No relapse
39	F.	Dec., 1892	33	Wife of South African merchant	Unfavourable (H)	5 years	6th	Alcohol made her vomit, but she continued to drink, and the treatment had no result
40	M.	Jan., 1893	41	Captain in army, married	Favourable (H)	3 years	3rd	Temporary improvement, but relapse after 7 months
41	M.	Feb., 1893	50	Clerk, married	Favourable	15 years	4th	Relapse after 5 months
42	F.	Feb., 1893	45	Housekeeper, single	Unfavourable	10 years	4th	No effect
43	M.	Mar., 1893	40	Clerk, married	Unfavourable	15 years	4th	Several relapses, but permanently benefited
44	M.	Mar., 1893	45	Butler, married	Unfavourable	10 years	4th	Relapse after 3 months
45	M.	Mar., 1893	30	Gentleman, single	Favourable	10 years	2nd	No effect

(H) means strongly marked heredity, and that several members of the family have suffered from chronic alcoholism.

Case.	Sex.	Date.	Age.	Condition.	Nature of Surroundings.	Duration of Habit.	Degree of Hypnosis.	Result.
46	M.	April, 1893	28	Clerk, married	Favourable	5 years	5th	Cured. No relapse
47	F.	June, 1893	35	Servant, married	Favourable	5 years	5th	Relapse after 3 months
48	M.	June, 1893	39	Clerk, single	Unfavourable	10 years	5th	Relapse after 8 months
49	M.	July, 1893	40	Labourer, married	Unfavourable	7 years	4th	Relapse after 4 months
50	M.	July, 1893	45	Engineer, married	Favourable	5 years	4th	Permanently benefited
51	F.	Oct., 1893	44	Wife of chemist	Unfavourable	7 years	6th	Relapse after 2 months
52	F.	Mar., 1894	30	Lady of property, single	Favourable (H)	5 years	6th	Cured. No relapse
53	M.	Mar., 1894	52	Porter, married	Favourable	20 years	4th	Relapse after 2 months
54	F.	April, 1894	47	Wife of gentleman	Unfavourable (H)	5 years	2nd	No effect
55	F.	April, 1894	30	Nurse	Favourable (H)	4 years	6th	She took no alcohol for 2 years; then had a bad relapse. Is now again apparently cured
56	F.	May, 1894	32	Servant, married	Favourable	3 years	6th	Relapse after 3 months
57	M.	July, 1894	45	Shopkeeper, married	Favourable (H)	5 years	3rd	Relapse after 4 months
58	M.	July, 1894	34	Clerk, single	Favourable	4 years	3rd	No effect
59	F.	July, 1894	50	No employment, single	Unfavourable	Over 10 years	5th	No effect
60	M.	Oct., 1894	28	Lawyer's clerk, single	Unfavourable	5 years	3rd	No effect
61	M.	Oct., 1894	50	Gentleman, married	Favourable	15 years	3rd	Permanent improvement, but occasional relapses
62	F.	Jan., 1895	55	Wife of gentleman	Favourable (H)	12 years	1st	Permanent improvement, but occasional relapses
63	F.	Feb., 1895	50	Lady of property, single	Favourable	3 years	3rd	Cured. No relapse
64	M.	April, 1895	41	Gentleman, married	Unfavourable (H)	10 years	3rd	Occasional relapses, but general improvement
65	M.	April, 1895	42	Clerk, married	Favourable	2 years	4th	Cured. No relapse

(H) means strongly marked heredity, and that several members of the family have suffered from chronic alcoholism.

ANALYSIS: 65 cases; 39 men, 26 women. Cured, 15; relapsed after apparent cure of 2 years, 2. Died 6 months after apparent cure, 1. Much benefited permanently, 7; relapsed after 3 to 6 months, 30. No effect, 10.

and is exposed to exceptional temptation, it is well to make the deterrent influence stronger by exciting a feeling of extreme physical repulsion, which can easily be done in the case of somnambulists. One has only to tell the patient that if he takes beer or spirits they will at once cause him to vomit, and then on waking him compel him to drink a glass of beer to produce such an attack of nausea and sickness as he will remember for many a day. Even in such a case it will, no doubt, be possible for the subject to re-educate himself to like liquor, just as a schoolboy who will go on smoking, though every pipe at first makes him sick, may at last overcome the repugnance and become a confirmed smoker.*

In the combination of moral and physical influences thus produced we possess a very powerful lever. If a man has been made a drunkard through the solicitations of fast companions, his power of resistance is reduced to nil, and the offer of a drink has so often been followed by its absorption that the sequence of events becomes automatic, an ideo-motor reflex action; but let such a man be hypnotized, and in this state be told that alcohol is poison, and that to offer him a drink is to grossly insult him—as in a case of a confirmed drunkard reported by Neilson—and we form a new inhibitory tract, which by repeatedly being traversed becomes well worn and habitual in place of the other. But it is plain that we must not expect immediate cure. Old channels cannot be destroyed, any

* While attending an inebriate patient lately I was visited by an American physician, Dr. A——, who told me that he had a large practice in the West, and that he was very successful in curing drunkards. My patient was a journalist, aged forty, and as he was a 'soaker' I felt very doubtful about his cure, though he was a somnambulic subject. I asked my visitor to try his hand, so as to reinforce mine, and he kindly complied. His method was to hypnotize him in the usual way, and then make strong anti-alcoholic suggestions. To arouse him he gave him a rather severe blow over the stomach, so that my patient awoke dazed and startled. We were a little disconcerted by this violence, but Dr. A—— assured me he found this method most successful, as the shock drove home the suggestions and fixed them. Unfortunately, however, success in this case was only very short-lived, and the man has since died from the effects of alcohol.

more than new ones can be formed, in the course of a few days. I always tell my patients that it takes one month to get over the crude effects of confirmed alcoholism, three months for the liver, stomach, and other organs to recover their tone, and twelve months for the brain power and morale to be re-established.

After a period of treatment, varying in different cases, a new personality or 'conscience' is produced, and the patient can return to his former associations and friends so protected as to be safe from relapse. The time necessary for restraint or close observation is from three to six weeks, and after that he should be under observation for at least a year, and the suggestions should be repeated at lengthening intervals during that time. It is by no means necessary that the patient should spend any portion of the time in a retreat if efficient control and observation can be exercised by a trustworthy relation, friend, or attendant. We must remember that at first every public-house offers a suggestion to drink, and every boon companion calls up associations of ideas connected with former self-indulgence, and opposed to the suggestions we have endeavoured to implant.

I was recently induced to undertake the case of a medical man, whose surroundings were extremely unsatisfactory, but the patient expressed a great desire to be cured, and proved a very susceptible subject. Dipsomaniacs are notoriously untrustworthy, and in a few days I found on inquiry that his protestations were false, and that he had made no attempt to avoid temptation, but rather put himself in its way. Under such circumstances the treatment had not a chance, and as he refused to submit to restraint we at once abandoned it.

In another case, which has since turned out most successful, the gentleman had a relapse at the end of a week, in consequence of being insufficiently guarded from special temptation. He at once told me of his fault, and explained how difficult he had found it to act against hypnotic suggestion and take the first glass of spirits. It

was a real battle, so he said, with his new conscience, in which conscience nearly won the day. After a month's hypnotic treatment he seemed positively proof against temptation, and I could trust him anywhere alone. It is now some years since the treatment was commenced, and he has remained a consistent abstainer, though he has paid me four or five visits for renewal and reinforcement of the anti-alcoholic suggestions.

If the contention of many of Charcot's school and others were correct, and if hypnosis were the induction of a morbid state which takes the place of the disease, I should still consider its exhibition justified in the treatment of confirmed drunkenness; and I look forward to a time when it will be used as a matter of routine treatment in our retreats, greatly to the increased utility of those excellent institutions. Of course, many cases will resist hypnotic treatment, as they resist everything else. Such cases are, I believe, absolutely hopeless, and it will be a good thing when the law allows us to keep them under permanent restraint.

My experience is very much the same as that of other physicians who have practised hypnotism all over the world—Liébeault, Bernheim, Bérillon, Forel, Schrenk-Notzing, Tokarsky, Wetterstrand, Osgood, Neilson, Bramwell, Cruise, Wingfield, Astley Cooper, Crichton Miller, Woods, and many others. Bérillon has contributed several papers of great interest on the subject to the *Revue de Psychothérapie*, which entirely corroborate the above remarks.

Dr. Tokarsky of Moscow contributed an important paper to the International Congress on Hypnotism held in Paris in 1901. He states that in thirteen years he has hypnotized 700 persons for the cure of drunkenness, and that he has had 80 per cent. of successes in cases where the patients came to him desirous of cure. They included all classes of society, from University professors to working men and peasants. He reckons no one as cured until at least a year has elapsed since the beginning of the treat-

ment. Hypnotism has taken a firm hold in Russia, and is practised by able physicians in every large town. For many years it was held under suspicion by the authorities, and could only be employed even by medical men under stringent conditions. For instance, two doctors had to be present at each sitting. These restrictions have lately been withdrawn, and hypnotism is treated like other medical procedures. Public dispensaries have been opened under official patronage in Petrograd, Moscow, Ekaterinoslaff, and other large cities, for the treatment of drunkenness by hypnotism. A very large number of patients avail themselves of the treatment—often over sixty a day, for instance, at Ekaterinoslaff—and the results are said to be most encouraging. A Russian Medical Society of Hypnology was founded in Moscow in 1902.

Russia is stated to be the most drunken country in the world, and therefore offers a very extended field for experiment and cure. Numerous articles on the subject have appeared in the *Revue de Psychothérapie* during the last few years, written in such a critical and impartial spirit by Russian physicians on the spot that they must carry conviction. We shall soon, therefore, have overwhelming evidence of an official character on this very important question.

One of the best articles I have read is that by Dr. Oscar Wiasemsky of Saratow (May, 1905). He had treated 319 cases up to a certain date (twelve months) before his paper was written, and he carefully describes his treatment and tabulates his results. He divides his cases into two classes, habitual and periodic drinkers (142 of the former, 174 of the latter, 3 being unclassed), and he finds the latter most amenable. He will not undertake a case unless the patient expresses the wish to be cured, and even with that proviso he found 197, over 60 per cent., refused to follow the treatment for more than a month. Of these, many were cured, some benefited, and only ten were registered as complete failures. Eighty-

one patients continued under treatment for from one to six months; eleven of these are reported as failures. The remaining thirty-eight patients continued under treatment for from six months to a year, and of these only four relapsed, and are reckoned as failures. So his figures come out about the same as Tokarsky's—viz., 80 per cent. of successes—when his conditions are observed. Dr. Wiasemsky's patients were, like Tokarsky's, drawn from all classes of the community, from University professors to peasants. He only failed to hypnotize one person out of the 319 patients at the first sitting. He required the patient to abstain from alcohol at least twenty-four hours before hypnotizing him, and he gave up the treatment if he drank within the first week.

He considers a year's treatment, comprising about twenty-five sittings, necessary in confirmed cases to restore the damaged brain and other organs, and he states very emphatically that he has invariably found hypnotic treatment conducive to rapid recovery of mind, body, and morale. Dr. Wingfield is very successful in the treatment of alcoholism, and gives some striking examples in his excellent book. He tells me he rarely fails to get profound hypnosis in these cases, and many of his patients have been cured for over twenty years.

In the treatment of morphinomania a different course must be adopted to that pursued in managing drunkenness. In the latter the supply of alcohol had better be cut off at once, but this course would be highly dangerous in the morphia habit, even with the aid of hypnotism. The quantity may be gradually decreased, until at the end of a week the drug should be discontinued altogether. This step is followed by a gastric crisis, during which the patient should be frequently hypnotized, and be kept up by nourishing foods and stimulants.

There are cases on record in which cures have been sudden, but I should greatly distrust their permanence except in very exceptional instances.

Many people have objected to hypnotism because they

consider it as interference with free-will. Do those who talk about a drunkard's free-will understand that they are speaking of a thing which has ceased to exist? A dipsomaniac is reported to have said that if he were given a glass of whisky, and told that drinking it would immediately consign him to the pains of hell, which might be exposed to his gaze, he would be unable to resist draining the glass. An occasional success in treating such a frightful disorder would justify the trial of hypnotism in dipsomania, even if it were surrounded with ten times the dangers with which people credit it. As a matter of fact, the treatment offers considerable hope of cure even in desperate cases, and it is absolutely free from risk.

The above observations apply with increased cogency to treatment of the morphia habit by hypnotic suggestion. It is well known that this habit is more deeply impressed on the system than alcoholism, and that morphinomaniacs are even less trustworthy in their resolutions and protestations than drunkards. In treating the morphia habit, it is therefore necessary to have the patient under very efficient observation, and it is desirable to induce the most advanced degree of hypnosis possible, in order that suggestion may act with the most complete effect.

Dr. Wetterstrand records a series of thirty-eight cases, of which he treated twenty-eight successfully by suggestion (*Zeitschrift für Hypnotismus*, March, 1896).

Sir Francis Cruise, Drs. Fitzgerald, Richard Hayes, Murphy, Redmond, and M'Cullagh of Dublin, related cases, and bore testimony to the value of hypnotism at the meeting of the Royal Academy of Medicine in Ireland on March 6, 1891 (*Dublin Journal of Medical Science*, May, 1891). All these physicians and surgeons had made trial of the treatment, both in their private and in their hospital practice, and spoke from personal observation. Sir F. Cruise has kindly informed me that the lady dipsomaniac referred to by him and Dr. Murphy continues well, and is apparently cured. He has supplied me with information regarding other interesting cases, and among these one of

diabetes mellitus. The patient is a young man whose condition was very serious. By hypnotic suggestion the urine has been reduced in quantity from 24 to 8 pints per diem, and the sugar proportionately, while the distressing thirst has been entirely relieved. Sir Francis says that, of course, he does not expect a cure, but it is a good thing to have been able so greatly to have mitigated the symptoms. His experience coincides with that of Van Renterghem and Van Eeden, who have been successful in their treatment of diabetes by suggestion, and who have also found it of value in Bright's disease.* The treatment of diabetes by hypnotic suggestion raises an interesting question. We know that this disease is often of psychical origin, and may follow serious emotional disturbance, such as fear, anxiety, anger, and deep grief where they occur in predisposed individuals. Sometimes 'psychical shock' is combined with bodily injury, as in a case reported by Professor Senator (*vide British Medical Journal*, February 17, 1900), when diabetes came on fourteen days after lightning-stroke. Suggestion by working centrally on the nervous system may be expected in these cases to reverse the morbid process, and thus effect amelioration, and perhaps ultimate cure. Dr. Draper, of Huddersfield, contributed a paper at the annual meeting of the British Gynæcological Society held at Newcastle in June, 1891. In this he records some interesting cases he has treated by hypnotism. One of obstinate hysterical vomiting is especially striking. Another is a case in which he found suggestion of extraordinary efficacy in relieving symptoms and promoting convalescence after he had removed the ovaries, thus corroborating my own experience in such cases. His paper is to be found in the *Provincial Medical Journal* for July, 1891. Dr. Draper tells me he has used hypnotism with gratifying results in eighteen cases of midwifery, and that he has performed a considerable number of surgical operations under hypnotic anæsthesia. Dr. Jane

* See interesting case reported by Dr. Francis, p. 332.

Walker, of the New Hospital for Women, London, records an interesting case of confinement under hypnosis in the *Revue de l'Hypnotisme*, 1896. The manner in which many English practitioners have taken up hypnotism is exactly that advocated by Professor Pitres in addressing his students at Bordeaux: 'Be physicians, gentlemen, and not hypnotizers; but learn how to apply hypnotism, and be ready to make use of it in suitable cases.'

CHAPTER VIII

Inhibition.—Definition.—Dynamogenesis.—Theories of Brown-Séquard.—Lauder Brunton.—Interference.—Experiments.

I PROPOSE in the following chapter to consider briefly the subject of inhibition, as it seems to me to be the key to the proper comprehension of hypnotic phenomena. The subject is a difficult one, and I would refer the student desirous of fully studying it to the works of Lauder Brunton,* Brown-Séquard,† and Heidenhain.‡

Inhibition is defined as being 'the more or less complete arrest of present functional activity of a structure or organ by a restraining influence exerted over it through a nerve centre,'§ or more fully by Lauder Brunton as 'the arrest of the functions of a structure or organ by the action upon it of another, while its power to execute those functions is still retained and can be manifested as soon as the restraining power is removed.'

It will be seen from these definitions that inhibition is quite a different thing to the loss of function which occurs in paralysis, and the cessation of function which follows exhaustion. There are two characteristics which are of great importance in the consideration of the relationship between inhibition and hypnotism: the suddenness of its induction and removal, and the want of apparent proportion between the cause and effect—*i.e.*, a relatively small

* 'On the Nature of Inhibition and the Action of Drugs upon it' (reprinted from *Nature*), London, 1883. 'On Inhibition, Peripheral and Central,' West Riding Reports, 1874.

† 'Sur l'Inhibition et la Dynamogénésie,' *Gazette Hebdominaire de Médecine*, etc., 1882.

‡ 'Hypnotism, or Animal Magnetism,' London, 1888.

§ 'Lexicon of Medical Terms,' New Sydenham Society.

excitation being capable of determining most extensive results. Under ordinary circumstances stimulation of a motor nerve by an electric current produces in response the contraction of the muscles to which the nerve is distributed, and irritation of a sensory nerve produces a sensory reaction; *e.g.*, stimulation of the gustatory nerve arouses taste sensations, of the optic nerve visual sensations, etc. But stimulation of a nerve is not always followed by functional activity. On the contrary, it is sometimes followed by cessation of activity. 'Afferent impulses reaching a nervous centre may, instead of stimulating it to activity, stop or inhibit an activity previously going on. Whenever in any tissue energy is being set free, nervous energy brought to bear on the tissue may affect the rate or amount of energy set free in two different ways: on the one hand, it may increase or quicken the setting free of energy; on the other hand, it may slacken, hinder, or inhibit the setting free of energy' (Foster's 'Physiology,' p. 185).

The recognition of the part inhibition plays in vital phenomena is undoubtedly one of the most important discoveries which have been made in physiology since Harvey discovered the circulation of the blood. It throws light upon an immense number of phenomena previously inexplicable, and enables us to form theories of a satisfactory nature about many vital problems. It offers an explanation of the nature of hypnotic states, which is at least as satisfactory as that we have of the action of many drugs.

The nervous mechanism of the heart affords the best and most commonly cited example of inhibitory action, and here it was first studied by Weber and Claud Bernard in 1848. The cardiac ganglia derived from the sympathetic preside over the movements of the organ, and in response to the stimulus of the intraventricular blood-pressure cause rhythmical contraction of the cavities. Their action is, however, controlled by the pneumogastric nerve, through which impulses of an inhibitory nature are

constantly travelling and acting as a restraining force. Paralysis of the pneumogastric, of course, does away with its action, and hence we have, among other symptoms of this condition, increased rapidity of the contractions of the heart from withdrawal of the inhibitory influence. This is demonstrated by dividing the pneumogastric in animals, and it has also been seen in cases where it has been possible to exert pressure on the nerve in men. Thus, the late Professor Czermack had a small glandular tumour in close contact with the right pneumogastric nerve, and he was able by pressure on this to compress the nerve to any extent he wished, and either to completely stop the heart or simply to retard it (Lauder Brunton, ' Inhibition,' West Riding Reports, 1874).

If, when the heart is beating regularly, the branches of the pneumogastric going to it are stimulated by the passage through them of an interrupted electric current, the heart will stop beating, and it will be found flaccid and in a state of muscular relaxation. This happens when the current is of sufficient intensity; but it may be insufficiently powerful to stop the action altogether, and in that case we shall see all degrees of interference, from mere slight retardation to complete arrest.

But the action of the heart may be inhibited by influencing it through the pneumogastric in other ways. Golz's tapping experiment illustrates this. He exposed the heart and vessels, and also the intestines, in a frog, and he found that tapping on the intestines with the scalpel handle had the effect of stopping the heart. The practical bearing of this experiment is seen in cases where sudden death follows a blow on the stomach or abdomen. The heart is stopped by an intense stimulation of the pneumogastric through its gastric branches.

These examples show the effect of inhibition of mechanical origin, but we constantly see how the heart may be inhibited by influences of psychical origin. If the stimulation is intense, and the organ weak, absolute stoppage of the heart may ensue; and as it is with the

interrupted current, so it is with the effects of emotion and shock. The heart may either stop or its action may simply be interfered with.

As in the heart we find two nervous agencies at work, the one exerting an exciting and the other a restraining influence, so it is in respect to all our functions and organs. There is a system of action and counter-action, and in a state of health there is a proper relative balance maintained between the two. There is interaction of nervous force, and no function or organ in normal life has full and unrestricted play, for its activity is modified by the interferences of nervous impulses arriving from other parts. Some of these impulses are of an inhibitory nature, and the amount of response to stimulation depends not only on the strength of the stimulus, but also on that of the counteracting inhibitory impulse. For example, a person receives a violent blow, and a nervous impulse of great force and tension is sent from the seat of injury to the brain centres. The natural response to the stimulus will be a correspondingly strong discharge of energy from the receiving centres along the motor tracts, and vigorous muscular contraction taking the form of retaliatory violence will result; this action may be called cerebro-reflex, and the less the injured person is controlled by reason, the simpler will be the mechanism of the act. But in educated and disciplined communities, cerebro-reflex movements are not allowed their full play, for the functions of the highest controlling centres come into action; and in addition to excito-motor impulses sent from the motor centres, there are other impulses discharged from the centres of the highest level. These latter will be of an inhibitory nature, and will modify those emanating from the lower levels. If the assaulted person has so developed his faculties of restraint and judgment that they have become the dominant features of his character, he will reflect that, instead of returning the blow, it may be better to either take no notice of it, or proceed by legal action. In either case a

strong inhibitory impulse from the highest centres will neutralize the cerebro-reflex one. If the injury is severe, or the power of restraint not fully developed, the action of the highest level may not be sufficient to entirely neutralize the reflex response, and the fist may be clenched or a cry uttered. It is evident, then, that not only function, but conduct also, depends largely on inhibition.

The controlling action of the highest centres in inhibiting cerebro-reflex action is seen in the exaggerated start a person makes on receiving a sensory impression when his mind is not ready to receive it; for instance, the touch of a friend's hand on the shoulder will cause one to almost jump from the chair, if the faculties of attention are off guard, or if one is in a state of reverie. Similarly, in hypnosis (inhibition of the cells of the highest cortical centres) reflex actions are generally exaggerated.

Inhibition may be either very extended in its action or extremely circumscribed. An example of the former is seen in the tremendous effect which follows irritation of the small mass of grey matter (the vital knot) situated at the upper part of the medulla oblongata. An intense inhibitory impulse is discharged, and the result is instant death from fatal interference with the functions of the heart and lungs: general inhibition is produced. Its confinement to a very small area is seen when the auriculo-cervical nerve in a rabbit is irritated. Paralysis from inhibition of the vasomotor nerves of the ear is produced, with immediate flushing of the part. Brown-Séquard has obtained some typical illustrations of inhibitory action. By passing carbonic acid through the upper part of the larynx of a dog, and so irritating the peripheral endings of the laryngeal nerves, respiratory movements were at once checked, though communication between the lungs and the external air was freely maintained by means of a tube, and though the gas was prevented acting on the bronchial mucous membrane by division of the trachea. On the other hand, when he irritated the pharyngeal mucous membrane by directing the vapour of chloroform

upon it, he found that the contrary effect was produced, and respiratory movements became greatly exaggerated and accelerated, though the quantity applied was very small, and it was prevented reaching the lungs.*

In the case of general inhibition of vital functions following irritation of the vital knot, we have seen the most intense and widespread action of this force, and in the different degrees of cardiac interference produced by stimulation of the pneumogastric we have an example of a more localized but still intense form of inhibition. As Nasmyth's hammer can either wield a gigantic bar of steel or crack a walnut, so inhibition has all grades of action, and its effects may be extremely circumscribed or widespread.

For example: No function of organic life is more influenced by mental states than that of salivation. The thought of savoury food when one is hungry is sufficient to make the salivary glands secrete and the mouth water, while fear or disgust will have an exactly opposite effect, and the mouth becomes dry and parched.†

Tarchanoff gives some interesting examples of inhibitory action, and the following are selected from his book:

If the posterior limbs of a frog be plunged into a weak acid

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* Brown-Séquard has pointed out how in the oncoming of sleep inhibitory impulses affect different muscles in order: the eyelids become heavy from inhibitory action on the levatores palpebrarum, the head tends to fall from inhibition of the muscles which support it. At the same time an inhibitory impulse affects the heart and lungs, and the action of these becomes slower. Consentaneously the mental faculties become dulled and inactive from their inhibition. In using hypnotism one endeavours by word-painting to figure in the subject's mind an image of the natural processes, relying on suggestion being followed by realization of the conditions suggested.

Brown-Séquard quotes the experiments of Fleming and Augustus Waller, showing how simultaneous pressure on the cervical sympathetic, the pneumogastric, and the carotid determines sleep. He supposes that these procedures act as peripheral irritations which are carried to a certain point—situated, probably, at the base of the brain—and that from this point proceed inhibitory impulses which affect the functioning of the different centres (*Archives de Physiologie*, January, 1889).

† This effect is taken advantage of by some of the Indian tribes. If a man is suspected of a crime he is given rice to chew,

solution, the animal will withdraw them at once; but if at the same time the middle region of its brain be stimulated by an electric current or by a solution of salt, the movement does not take place, because the reflex movements have been inhibited by the action induced in the brain.

If a section of the upper part of the spinal cord of a frog be removed, and the remaining portion be connected with the brain by a circuit in which a galvanometer is placed, the needle will be observed to oscillate periodically from the passage through the circuit of nerve impulses proceeding from the bulbar centres, and this movement will continue for some time; but if a nerve in connection with the cord be irritated, it will be found that the needle will become motionless as long as the irritation is kept up. We here see that nervous action can be inhibited in the brain centres by peripheral stimulation, just as in the previous example reflex action was arrested by acting on the cerebral centres.

Tarchanoff argues that external sensory impressions act as inhibitory or moderating influences on the nervous centres of the brain, and that in hypnosis, as there is an absence of these impressions, the phenomena of excitation of the centres are no longer counterpoised, and are, therefore, in the ascendant. To support this view he instances an experiment he has made on a young dog. He exposed the motor area of the cerebrum, and stimulated it to action by applying an electric current. This procedure was found to excite localized movement, according to the zone experimented on; but when he held a piece of meat to the animal's nose, he found the movements ceased—*i.e.*, the excitation of the centres of smell and sight produced an inhibitory action on the motor centres. To enforce the same theory, he quotes an experiment performed on dogs by Heidenhain and Boubnoff. They find that when dogs are poisoned by morphia, so that ordinary external impressions cease to act upon the brain, irritation of the motor zones produces strong tonic contractions, which continue after the excitation has ceased; but if other parts of the grey matter be gently stimulated, the contractions at once cease; and the same effect is observed if the senses of sight, hearing, smell, or touch be peripherally excited. He draws an analogy between the morphinized dog and the hypnotized subject, and seeks to show how in the latter case hyperexcitability of the muscular system and senses exists, in consequence of the absence of many-sided impressions from the closure of all the avenues of sense, except those specially excited.

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and told to spit it out. The guilty person is so affected by terror that the rice is reduced to a fine dry powder, in consequence of the absence of saliva, whilst if innocent it is ejected as pulp. But the function of the salivary glands can be influenced mechanically in the same way as that of the heart. Take the submaxillary gland. It is supplied with vasomotor nerves, which keep its vessels moderately contracted when food is not being taken. A branch of the chorda tympani nerve seems to act as inhibitory nerve of the vaso-constrictor fibres of the vessels supplying the gland, and irritation of it has the effect of causing dilatation of the vessels, with consequent increased afflux of blood and increased functional activity—*i.e.*, increased flow of saliva.

The accompanying diagram shows how inhibitory action affects the calibre of an artery, and consequently the blood-supply of a part. G is a nerve ganglion connected with the artery A, through a nerve N, and I is a centrifugal nerve derived from an inhibitory centre. Under ordinary circumstances G is constantly acting on A as a vaso-constrictor, and keeps its walls moderately contracted. When, however, an inhibitory impulse arrives at G through I, the action of G is arrested and restrained, and the vessel A is free to dilate.

Lauder Brunton thinks inhibition of secretion may result either from interference with the supply of blood to an organ, with consequent cramp of the arterioles and local anæmia, or from direct action of inhibitory nerves on motor cells without any changes occurring in the vessels.

Brown-Séquard supposes that where on the one hand there is an inhibitory influence at work, there is also present on the other hand its antithesis—dynamogenesis. Nervous force cannot, any more than other forms of energy, be created; it can only be transformed and made to act in altered combinations and different directions.

Thus Beaunis says that every nervous excitation determines in the excited nervous substance two contrary modifications, an impulsion towards activity and a tendency to inhibition. Similarly Lauder Brunton considers that inhibition is the opposite phase to stimulation, that both depend on excitation, and that the resulting condition depends upon the force with which and the direction from which their mutual interference acts.

It has been generally held that inhibition is the property of special nerve centres situated in the brain and spinal cord, from which proceed nervous discharges of an inhibitory nature, in the same way as from motor centres proceed motor impulses. It is proved that the higher centres of the brain exercise an inhibitory action on

those below them, and that these, again, control the next below them, and so on. Reflex action increases in proportion to the removal of the control of the higher centres, not only in the brain, but also in the cord, for when the cord is removed in segments we find the excitability of the segment below increases with the removal of the one above. So the activity of the lower cerebral centres will become more apparent in proportion to the removal of the control of the higher.

The heart, again, affords one of the best examples of the close association of neuro-regulatory arrangements and their action upon each other. If the heart is removed from a cold-blooded animal, it will continue to contract rhythmically owing to its containing within itself ganglia derived from the sympathetic system. But these ganglia have not all the same functions. The principal ones, three in number, are those of Bidder, Remak, and Ludwig. The two former appear to be excitor centres, while the latter is a moderating or inhibitory centre. This is well shown by experiment. Let the heart be cut into two unequal portions, one consisting of the right ventricle (with the ganglion of Remak), and the other of the two auricles and the left ventricle (containing Ludwig's and Bidder's ganglia), the first portion will continue to beat, but the second will remain quiet. Let this second portion be again divided, and the auricles (containing in their septum Ludwig's ganglion) will be found to remain quiet, while the ventricle will recommence beating. Ludwig's ganglion has thus proved strong enough to counteract one excitor ganglionic centre, but not sufficiently strong to control two (Küss's ' Lectures on Physiology,' edited by Amory, p. 169).

It is probable, as Brown-Séquard says, that all sensory and sensorial nerves are capable of determining inhibition, and the study of hypnotism affords a valuable confirmation of this theory. The highest centres may be inhibited by acting on several sensory areas and tracts, and the position of these seems to vary in different individuals. Gentle

friction, for instance, of the forehead will in many persons speedily determine cortical inhibition and hypnosis, and some writers have even described inhibitory or hypnogenic zones.* The phenomena of zonar epilepsy afford a useful analogy here. Slight pressure on the ovaries will in many of these cases start an epileptiform fit—*i.e.*, will convey a strong inhibitory impulse to the cortex—and the highest

* Professor Pitres gives an exhaustive account of these zones in his important work. His position and experience demand our acceptance of the facts he records, but some of them—*e.g.*, the occurrence of ideogenic zones in hysterical subjects, pressure upon which gives rise to various emotions and sensations according to the areas stimulated—make considerable demands on our imagination. It is a matter for regret that, like Charcot, he seems to have confined his researches in hypnotism almost entirely to hysterical subjects, as experiments on healthy persons give much more satisfactory and trustworthy results. Bernheim denies the occurrence of hypnogenic zones, except as a result of conscious or unconscious suggestion on the part of the operator; but Pitres gives evidence that it is impossible to ignore, and it is, I think, best to admit that these zones are of spontaneous origin in a few exceptional cases, just as Charcot's three stages may sometimes occur without suggestion. According to Pitres, the zones must be carefully looked for, as they are usually confined to a small area. There may be only one discoverable, or the number may mount up to fifteen or more. He describes (with diagrams) the case of one hysterical young woman having ten hypnogenic zones; two of these were situated in the middle line, one at the root of the nose, and the other on the vertex, and eight on the left side—viz., on the malar process, the superior body of the clavicle, mammary region, bend of the elbow, upper and external part of the thigh, knee, external malleolus, and internal malleolus.

The result of touching any of these zones was that the girl fell at once into the lethargic stage of hypnosis (Charcot), and remained in it until she awoke spontaneously, or was awakened by touching other areas which acted as waking (hypno-phrenetic) zones. The danger and inconvenience arising from the existence of these zones, whether natural or acquired, is demonstrated by many cases referred to by Dr. Pitres, and if they are found to exist, hypnotic suggestion should be employed to remove them. A physician once told me that he accidentally touched one of Charcot's patients on the elbow, and that she at once passed into a state of catalepsy; and in Luys's clinique I have seen patients who are equally subject to being in a moment reduced to a stage of helplessness, and perhaps unconsciousness. Such development of hysterical phenomena, whether practised in the wards of a hospital or on a public platform, constitutes to my mind a grave abuse of hypnotism. Instead of developing the morbid hypersusceptibility of hysterical subjects by hypnotic education, it appears to me much more commendable to correct and cure it ('Hystérie et Hypnotisme,' vol. ii., chap. xliv.).

layer will be inhibited with corresponding overaction from dynamogenesis of the lower. Conversely we find that strong pressure over the ovaries will cut short an attack which has begun, thus showing the close relationship between the neuro-regulatory forces. But though it is probable that hypnogenic zones may sometimes exist spontaneously, we must be careful to avoid confusing them with what we may call habit zones. Nerve habits are readily set up, especially in hysterical subjects, and an artificial hypnogenic zone is easily called into being by suggestion. One would only have to tell a sensitive person that pressure on his right temple would determine the hypnotic state, and we should either at once, or in a short time, find that this action would become a hypnogenic agent.

At Amsterdam Drs. Van Renterghem and Van Eeden used sometimes to awaken their patients by touching the tips of their noses, and this contact was at once sufficient to end the sleep, no matter how deep it might be. An artificial dynamogenic zone was created. The effects of nerve habit are, of course, visible all around us. The paterfamilias who has only to take up the paper after dinner and sit in his accustomed chair by the fire, in order to almost immediately fall into a doze, is a familiar example of this condition; only a little less marked than that which we sometimes set up by hypnotism, when we give the patient a piece of paper, and tell him that on looking at it he will at once feel sleepy and fall into a sound sleep. The sleep of the business man over his accustomed paper is, I believe, frequently of the hypnotic type. Though it commonly lasts only a few minutes, such sleepers have frequently told me that it refreshes them more than their night's rest; it is the rest of simple inhibition. Many great generals, like Napoleon, have been able to snatch sleep of this type at any time, and to awake from it not only refreshed but inspired. Ordinary hypnosis is not alone in producing this sudden or rapid change—'a few moments of sleep,' a mere blur across

the field of consciousness, will sometimes bring a renovation which hours of lying down in darkness and silence would not yield. Some subtle adjustment of nervous energy to organic needs takes place, and the whole aspect of the case changes (Myers). Brown-Séquard points out that anæmia is a predisposing cause of inhibition, and it has been the experience of all observers in regard to hypnotism that anæmic persons are often the best subjects.

The tendency of nerve habits to be formed more readily in the hypnotic than in the waking condition is shown by the fact that the subject is extremely apt to assume spontaneously, on subsequent occasions, the attitude he was made to adopt when first hypnotized. Thus, if the arm was raised at right angles to the body at the moment hypnosis was complete, it is very probable that this action becomes in the mind an essential part of the procedure, and will be repeated on every subsequent occasion unless checked by suggestion.

The subject of inhibition was closely studied by the late Sir Lauder Brunton, and his researches enable us to get a little nearer the comprehension of some hypnotic phenomena. He founded his theory on the analogy afforded in physics by the interference of rays of light and sound with one another when they meet in certain relationship.* When two rays of light are combined so that the crests of the waves of which they consist coincide, the light becomes brighter; but if they are thrown together so that the crests of the waves in the first ray correspond with the hollows of those in the second, mutual interference is the result, and they so neutralize one another that darkness is then produced. Applied to the nervous system, the hypothesis implies that nervous impulses travel like waves along the nerve tracts, and as long as they coincide—apex to apex, and hollow to hollow—sensation or movement is the result of the impulse; but if the coincidence be interfered with, we get more or less complete neutralization of the impulse

* *Loc. cit.*

and inhibition. The way in which waves of light may be made to mutually interfere is by causing them to pass through channels of different lengths, so that when they meet, one may be half a length behind the other, the crest of the first corresponding with the fundus of the second. In the nervous system it is a matter of constant occurrence that the impulse waves of nerve energy are travelling towards the centres through channels of different lengths, and it follows, *ex hypothesi*, that they are interfering with each other in different degrees. The whole nervous mechanism is subjected in its normal state to a mutual check system, so that a balance is automatically maintained between sensory and motor nerves, and they are influenced to a greater or less degree by impulses arriving from the higher centres—*i.e.*, those concerned in volition, etc.

Lauder Brunton illustrated this point by taking the case of tickling. Here convulsive muscular movements are set up by gentle continuous irritation over a sensory surface. An impulse made up of waves is promulgated to the sensory centres, and reflected from them down the motor tracts. The stimulation being monotonous, continuous, and consisting of currents of the same intensity, there is no wave interference, and the motor movements resultant are reflex. But let the pressure be increased, so that, instead of tickling, pain is produced; then, in place of a weak current travelling up one nervous channel, we have a strong, irregular impulse disseminated into channels of different lengths; when it arrives at the centres which have been subjected to interference, a different condition will result, and the reaction will cease to be merely reflex.

Up to a certain point the action of the will may be called forth to check the convulsive movements, and this will operate by interference, the waves constituting the impulse from the highest centres so impinging upon the excito-motor waves as to cause interference and inhibition.

Inhibition, therefore, according to Lauder Brunton, is not a special function of certain cells and nerve fibres, but may be produced through any sensory or motor cell, and depends, not on the properties of the cell, but on its relationship to other cells or fibres. 'Motion, sensation, inhibition, or stimulation, are not positive, but simply relative terms, and stimulating or inhibitory functions may be exercised by the same cell, according to the relation which subsists between the wave-lengths of the impulses travelling to or from it, the distance over which they travel, and the rapidity with which they are propagated.'* Showing the effect of sufficient inducement to overcome what we may almost call reflex action, I may mention that a physician of my acquaintance found his little daughter extraordinarily ticklish, and used to tease her by tickling her; but he called up such a strong inhibitory action by giving her sixpence when she bore it without wincing that she soon became quite callous to it.

Applying the theory of interference to the induction of hypnosis, we find that it serves to explain several points. Take hypnotization by the method of fixation,

* Lauder Brunton, discussing the action of atropia on frogs, showed how the animal gradually loses, first, the power of voluntary motion, next the power of directing its movements, then the power of springing at all, and finally reflex action, and argued that the drug lessens the functional activity of nerve cells and fibres. The impulses are retarded, and thus the length of nervous connection between the cells of the spinal cord, which is calculated to keep them in proper relation in the normal animal, just suffices at a certain stage to throw the impulses half a wave's length behind the other, and thus to cause complete inhibition and apparent paralysis. The paralysis is only apparent, for after a time the animal will be found to respond to slight stimulation in the same manner as if it had been poisoned with strychnia—*i.e.*, in an exaggerated degree. He explains this by assuming that the retardation of the impulses proceeds as the poison continues to act, so that the waves after a time interfere less and less with one another, and finally again coincide. The effect of the coincidence is increased excitability on stimulation. This is on the theory that impulses reach the centres by different routes of varying length, so contrived that in normal life a constant relationship is maintained between the position of waves, and a healthy balance is maintained.

for example. An intense and unusual stimulus is applied to the optic nerve, and by it carried to the optic centres, in the form of an afferent current of abnormal form and intensity. The effect of such strong stimulation is not confined to the receiving centre, but overflows it and acts upon neighbouring and associated ones. The nerve impulse thus sent through the communicating nerve fibres is composed of waves which meet the normal currents traversing these channels in such a way as to interfere with and neutralize them, and hence we arrive at inhibition, either complete or in part, of the functions of many or a few of the cortical centres. The condition once induced, its reproduction is rendered easy by the setting up of a nerve habit. Psychical processes, such as auto- or outside suggestion, may be supposed to cause hypnosis by originating a nerve impulse, starting from the ideational centres; but as to the nature of that nerve impulse it is impossible to dogmatize. Myers says that psychical processes can never be explained by physiological theories, but the physiologist will not readily admit that proposition. Inhibition, therefore, is interference, not abolition of function, and its distinguishing characteristic is its immediate production and removability. By suggestion we may be supposed to start an impulse from the higher centres, the waves of which are propagated to the centres it is sought to influence, and which either coincide with and strengthen the efferent waves proceeding from these (dynamogenesis), or by interfering with them cause inhibition.

CHAPTER IX

Natural Analogies of Hypnosis.—Relation of Hypnosis to Sleep and other Conditions.—Theory of Hypnosis.—Leucomaines and Animal Alkaloids.—Hughlings Jackson's Three Planes of the Central Nervous System.—Cortical Inhibition.—Morselli's Mental States and Centrifugal Equivalents.—Cortical Control.—Function stimulated by Hypnotism.—Foundations of Consciousness.—Chloroform and Hypnotic Anæsthesia contrasted.—McDougall's Views.—Individuality dependent on Continuity of Memory.—Pathological and Hypnotic Lethargy.—Alcohol and Hypnosis.—Researches of Tamburini and other Italian Scientists on Excretions during Hypnosis.—Hypnotism and Hibernation.

In the foregoing pages I have endeavoured to show that the hypnotic state has many analogies in ordinary life, and that it is not so much the creation of a new condition as the exaggeration of normal or partially normal ones. It is the intentional production of a physical state, similar to many which occur spontaneously in all persons under certain circumstances.

The phenomena of hypnotism have points in common with those of natural sleep, reverie, mental concentration, intense nervous excitement, religious ecstasy, post-epileptic states, as well as with the effects produced by alcohol and various drugs. There is also a close resemblance between some forms of hypnosis and hysteria, and the affinity between spontaneous and induced catalepsy and somnambulism is obvious. The distinguishing and characteristic feature of the hypnotic state is increase in the ideo-motor, ideo-sensory, and reflex excitability of the brain, shown by increased readiness to receive, and increased ability to act upon suggestion.

To elucidate more clearly the rationale of hypnotism,

I propose in the following pages to consider briefly the physiology of conditions resembling it, and the main points of difference between them.

I cannot but think that Bernheim has somewhat exaggerated the closeness of the analogy between hypnotic and natural sleep. To outward appearances the resemblance is certainly complete: hypnosis may pass into natural sleep, and sleep may partake of the characteristics of hypnosis in the same way that sleep may merge into coma, or may pass into an epileptic condition; but there are clear lines of demarcation between all these states, and the sleep of everyday life is distinct from its hypnotic counterfeit.

A short review of the etiology of natural sleep will render it more easy to understand the physiology of hypnotism. Sleep seems to depend upon several causes, and to be the resultant of their joint action. Some of these are of external and others of internal origin. First, there is exhaustion of potential energy in the brain cells, resulting from their functional activity; secondly, there is a condition of cerebral anæmia; and thirdly, there is an accumulation in the tissues, and especially in the brain centres, of waste products. To these we must add the factor of periodicity—that ebb and flow of organic life which has so potent an influence in all vital phenomena. To ensure sleep it is necessary that these agencies should be assisted by other conditions, and the most important of these are the absence of exciting sensory stimuli, a comfortable posture, and a state of mental tranquillity and repose. Sleep is banished if there is cerebral congestion, if the mind is in a state of turmoil or excitement, or if stimulating and vivid sensory impressions are constantly arriving at the highest centres. Muscular repose is also, as a rule, a necessary preliminary to sleep, though there are many instances in which soldiers and others under circumstances of exceptional fatigue have not been prevented from sleeping in the most strained and uncomfortable positions, any more than they have been kept

awake by the continuous roar of battle or the blustering of the gale.

The chemical theory that sleep results from the accumulation of waste products (leucomaines) in the organs is now very generally held. Preyer supposes that kreatin and lactic acid are formed during the periods of mental activity, that they accumulate in the brain centres, and from their affinity for oxygen rob the cells of this element, upon an abundant supply of which their molecular activity depends. A sleeper from this point of view may therefore be considered as narcotized by the waste products of his own tissues. This theory also explains the periodicity of sleep, for these products are being constantly formed from tissue change during wakefulness, and as their quantity increases, they cause proportionate and progressive drowsiness, and finally sleep. During sleep or inactivity of the cerebral centres no formation of these products takes place, and the accumulation is gradually worked off and eliminated; a supply of oxygen again becomes available, and molecular energy is restored. When recuperation is complete, waking ensues, and the same process is again repeated. It has, moreover, been found that the vital alkaloids formed during sleep have a convulsive and stimulating action on the nerve centres, whereas those which are formed during the day have a sedative and narcotic effect. The oxygen, which is so essential to the functioning of the highest centres, is partly derived from the blood, so that the cerebral respiration is a term in use; and is partly contained in a loosely combined state in the nervous tissue, in the same way as the oxygen required for the explosion of gunpowder is contained in the nitre of its composition (Lauder Brunton). The amount of oxygen, therefore, contained in the nerve tissue regulates the activity of the nerve cells, and when the German physiologist said that there was no thought without phosphorus, he might have added, nor without oxygen. Nerve energy is liberated by the explosive combination of the carbonaceous elements in the nerve tissue

with oxygen; and if the supply of oxygen is adequate the explosive movements which initiate nervous impulses are vigorous and their psychical concomitants are correspondingly vivid. The necessity for oxygen in brain processes is shown by the benumbing and soporific effect of working in a crowded, ill-ventilated room. The cerebral respiration is affected long before that through the lungs.

Brown-Séquard* thinks that sleep results from inhibition, pure and simple, and supposes that the inhibitory impulses proceed from the neighbourhood of the medulla. He contends that the drowsiness of indigestion is not produced by the formation and accumulation of leucomaines of abnormal quality, but arises from impulses of gastric origin, affecting the inhibitory centres through the pneumogastric.

There is almost as great a difference between the profound, dreamless, and physiologically perfect sleep of the healthy labouring man who earns his bread by the sweat of his brow and is untroubled by nerves, and the stuporose condition of the overfed and under-exercised dyspeptic, as there is between natural sleep and hypnosis. The reason of this appears to be that healthy physiological sleep is the outcome of all the causes I have enumerated, acting in their proper and just relationship and proportion; whereas in the sleep of indigestion we have one cause acting in excess—the accumulation of waste products and alkaloids in the tissues, as a result of imperfect assimilation and metabolism. The sleep is incomplete

* *Archives de Physiologie Normale et Pathologique*, January, 1889. He has demonstrated the fact that pigeons continue to sleep at regular intervals after the sympathetic nerves in the neck have been divided, and that dogs and cats sleep after removal of the superior cervical ganglion of one side, and division of the vago-sympathetic in the other—procedures leading to continued dilatation of the cerebral vessels, and thus proving that sleep does not depend so much on contraction of the vessels with consequent cerebral anæmia as has been supposed. Moreover, he found that pigeons continue to sleep after the removal of the lobes of the brain, from which he concluded that sleep does not result from influences of medullar origin, and is not dependent on the state of the cerebral lobes.

and one-sided here just as it is in hypnotism, and in both cases some of the elements of natural sleep are wanting. As in cases of indigestion, with somnolence and disturbed sleep, there are degrees of disturbance, varying from slight abnormality to complete change of type, so in hypnotism we see all degrees of hypnosis, from the condition, such as is seen in Charcot's cases, which has only a distant resemblance to normal sleep, to a state indistinguishable from and passing into it. The difference in type appears to depend upon the extent to which one factor is producing the condition to the exclusion of the others—whether the state is an auto-narcosis from the accumulation of alkaloids, is the result of inhibition alone, or is a combination of all the causes which go to make up normal sleep.

There is ground for believing that natural sleep assumes the hypnotic type much more frequently than is commonly supposed—*i.e.*, the sleeper is susceptible to suggestion from without. It is certain that many persons who are hypnotized for the first time, and the majority of those who by frequent repetition of the process have become good subjects, do not require any special stimulation of one sense for the production of hypnosis, expectant attention and verbal suggestion being sufficient to determine the condition. Those facts are calculated to upset many of the theories of the causation of hypnosis, and to confirm the dictum of Brown-Séquard that hypnosis does not depend upon exhaustion, but is a result of dynamic inhibition of the highest centres.

When Braid's method is employed, an intense strain is put upon the visual apparatus, and an excessive discharge from the cells of the visual centre is followed by its exhaustion and subsequent cessation of its functional activity. But in Bernheim's method there is no such localized stimulation and nervous exhaustion, and the condition induced would be indistinguishable from ordinary drowsiness or sleep, were it not that the subject is receptive of suggestion. The chemical theory would also

be explanatory of the phenomena of Braidism, but it quite breaks down when the suggestive method of inducing hypnosis is in question. The increased functional activity of a centre must lead to the increased oxidation of its elements, with increased formation of the products of molecular disintegration (vital alkaloids); and we know that the accumulation of these in the system is a cause of drowsiness and sleep. It is possible that their accumulation in one part of the brain may induce partial or complete inhibition of certain centres, with consequent interference with or abolition of their functions (*Tarchanoff*).

Healthy, dreamless sleep depends upon temporary abolition of the functions of the highest centres, together with a partial inhibition of those below—the middle and lower levels. In dreamful and disturbed sleep inhibition is less complete, and certain areas continue to discharge nervous energy and so produce dreams. The more intense the discharge, the more vivid the dream; and if the discharge be very intense, the attending process may overstep the limit of mere ideation and take the form of action: there will be movement or sleep-walking from stimulation and discharge of the motor areas. The actions will be unaccompanied by consciousness; for consciousness depends upon the functioning of all the higher centres in orderly relation, and in somnambulism this order is disarranged or destroyed. The actions, being unconscious, are automatic, and tend to partake of the nature of those usually or habitually performed. They will be in keeping with the character and temperament of the sleeper; for the nervous discharges will travel through well-worn and accustomed channels, and will hardly effect new combinations or movements.

The post-epileptic state shows some very important resemblances to hypnotic somnambulism; the researches of Dr. Hughlings Jackson and other observers enable us to understand its phenomena.

The central nervous system may be considered as composed of three divisions or layers: first, the medulla, pons,

and basal ganglia, which function the most organized processes of the animal economy—*i.e.*, nutrition, secretion, respiration, circulation; secondly, the motor areas of the cortex, which function muscular movements; and thirdly, the highest and last evolved cortical centres, which control and regulate the actions of those below them, and which produce new associated movements. Furthermore, we must suppose that these highest centres are assigned different grades in the hierarchy of the nervous system. It is the function of the highest of all, which are those last evolved, to control those immediately below them, and through them to exercise a governing influence over the entire nervous mechanism. It is only the functioning of these highest of all centres which is accompanied by psychical processes and is attended with full consciousness.

If the functioning of all three divisions is suspended, death ensues, and if the two higher divisions are entirely placed out of action, and the lowest only functions, with enfeebled force we get a state of coma, in which the patient lies absolutely motionless and unconscious, and out of which he cannot be roused. In this state, the functions of organic life alone continue, and they only with greatly diminished activity. Such are the coma of apoplectic states, alcoholic poisoning, etc. In these cases the condition depends upon destruction of the properties of the highest nervous arrangements, either from gross lesion or from chemical changes. One sees a somewhat similar condition produced by exhaustion of nervous elements in post-epileptic coma.

In natural, sound, dreamless sleep, we also get the action of the two highest divisions of the nervous system completely suspended, but the sleeper can be easily aroused, because the suspension depends to a great extent on cortical inhibition. In sleep accompanied by dreams there is incomplete suspension, and certain areas of the highest division continue to function apart from their usual combinations, and therefore more or

less unintelligently.* If the action of the discharging centres is energetic, it will, as we have seen, be accompanied by movements, and somnambulism may result. In hypnosis brought about by suggestion, cessation of function does not depend upon exhaustion, but is the result of inhibition, and is not, therefore, followed by exhaustion; on the contrary, it refreshes the system in the same way as, and in a marked degree more than, natural sleep. The awakening is immediate, and depends upon the removal of the inhibitory influence. If the phenomenon depended upon exhaustion of the nervous elements, time and rest would be required for recuperation, and this we know is not the case.

Hypnotism cannot, I believe, produce epilepsy *de novo*, even though it be employed ignorantly and recklessly; but under such circumstances it may determine a latent

* An experiment referred to by Heidenhain, and also by Gerald Yeo, serves to show how completely the higher cerebral faculties are in abeyance in the profounder states of hypnotism. Both these authors refer to the production of the 'echo voice.' This is produced by stroking the back of the subject's neck with the hand, when he will at once repeat any words said to him. The effect produced is curiously like that experienced in listening to a phonograph. The subject may be perfectly uneducated, and yet he will repeat accurately after the reciter an ode of Horace or the chorus from a Greek play (compare case on p. 81). An analogous experiment on a frog deprived of its brain illustrates how completely the profoundly hypnotized subject may be said to be 'robbed of his cerebral hemispheres.' If the frog's flanks be gently stroked, it will croak, not continuously, but each stroke will be followed by a croak, so that Yeo supposes there is an unknown relation between certain sensory surfaces and the speech centres (*op. cit.*, p. 13).

Another experiment is that of making a person speak by placing the hand over the left temple, the idea being, of course, to stimulate Broca's speech centre underneath. The subject will at once answer if spoken to; but, if the same place be again touched he will as suddenly become silent, though he may be in the middle of a word or sentence. I have seen several such experiments, but have hitherto been unable to repeat them on unprepared subjects. Heidenhain and the other writers of more than a few years ago were not so fully alive to the extraordinary readiness of the subject to act upon suggestion and to take advantage of the smallest hint as we are now. The subject's mind is like an extra sensitive plate. As the faintest light will affect the one, so will the slightest hint influence the other. Without denying that somatic reactions may occur in the hypnotic state, I think we should be very cautious in accepting them.

tendency. In hypnotizing epileptics, it is by no means uncommon to see a slight fit produced by the process. The same applies to the administration of chloroform and the ingestion of an excessive quantity of alcohol, and tends to show that in each case the agent acts on the cells of the same cortical area. The view put forth by Hughlings Jackson, in discussing epileptic convulsions, that the highest level of the cortex not only subserves the psychical processes and constitutes the physical substratum of consciousness—volition, thought, emotion, judgment, etc.—but also represents, though very indirectly, muscular movements and organic functions, throws an important light on the action of hypnotic suggestion on vital processes.

The action of hypnotism is probably exerted entirely on the highest centres, and if these represented only mental processes, it would be difficult to understand how by affecting them we could produce the changes in nutrition and function which undoubtedly result from hypnotic suggestion. But if it be correct to suppose that we can influence the functions of the lower centres by acting directly on the highest, that by influencing the hierarchy we can modify the behaviour of the subordinate functionaries of the body, we hold a key to the solution of the problem. According to Liébeault, we attack disease and affect function in gross by acting upon the starting-point and centre of vital processes (the cerebrum), instead of addressing ourselves to the treatment of their peripheral manifestations, and attacking these in detail by drugs.

I believe all physiologists are now agreed as to the effect the higher centres of the cerebral cortex are able to exert over the lower nervous arrangements. Professor Morselli, of Genoa, writes: 'Every mental state and every act of the intelligence has its centrifugal equivalent.'* 'The mental functions act as supreme and constant regulators of all the nervous processes, even of those which are purely automatic and are not attended with conscious-

* 'Fisiopsicologia dell' ipnotismo,' p. 14.

ness. Though they are withdrawn from the direct influence of the psychic activity, they are nevertheless dependent on it.'*

Bernheim contends that 'the brain controls all the organs and every function, and that each part of the organism has its ultimate representation in a brain cell, which is its *primum movens*.† Each movement is realized by a cortical motor centre, and each tactile, visceral, and muscular sensation by a cortical sensory cell.'

He considers that all the organs and functions are subordinate to psychical states, and that by determining these states we can influence function.‡ In the earlier part of this work I have quoted numerous instances showing the connection between psychical states and organic functions, but in these the psychical influence has for the most part been accidental and undirected, and the resulting reaction has not infrequently been more harmful than beneficial. Hypnotism enables us in many cases to control this influence and direct it into proper channels. I would compare the effect of emotional states to the conduct of the master of a large establishment. As long as everything goes on well his interference with minutiæ is not required, and would probably be harmful. Every foreman and servant knows his place, and the work is regulated as it were by clockwork. But let some grave source of danger or difficulty arise, and we shall find that the master's hand is needed to control his subordinates and to prevent confusion and damage arising. Suppose that, instead of orderly and necessary interference, his conduct is guided by passion or dictated by panic, and what do we find? Instead of his action being beneficial, it is injurious, and even disastrous. Action of the incompetent or panic-stricken master is comparable to the misdirected and haphazard influence of the higher centres on the general health and functions in emotional states;

* 'Fisiopsicologia dell' ipnotismo,' p. 24.
† 'Hypnotisme, Suggestion, Psycho-Thérapie,' p. 449.
‡ *Ibid.*, p. 46.

while the beneficial influence exerted by a cool-headed and capable one is paralleled by the influence the higher centres can be made to exercise over the lower by means of hypnotism.

Sir Lauder Brunton quoted a case which he considered strongly corroborative of his view that the highest layer of the cortical cells controls the functioning of the lower centres, and that it has an influence even over reflex actions. A patient under the care of Sir J. (then Dr.) Crichton Browne was attacked with facial erysipelas, which spread by metastasis to the brain. The man showed symptoms of cortical irritation, and examination showed that the reflexes were abolished. The disease progressed, and he became unconscious, and it was then found that the reflexes had returned. The patient died, and the autopsy revealed degenerative changes in the cortex.

Lauder Brunton, therefore, supposed that nerve currents set in motion by irritation of the brain, or some of its convolutions transmitted down the cord, may inhibit reflex action.* Dr. Mercier† and other writers on insanity point out how disease of the highest centres is nearly always accompanied by disorder of nutrition. This is especially seen in the alteration which takes place in the nails and hair, the former becoming brittle and ill-shapen, and the latter coarse and refractory. Dr. Van Eeden once showed me a little girl under treatment by suggestion for infantile paralysis. The little patient was gradually regaining the use of her legs, and a great improvement in general nutrition was apparent. In no direction was this more marked than in the toe-nails. For three years there had been no growth in these, and they had never required cutting; but a month after the treatment was commenced they had grown so long as to necessitate the use of the scissors, and from that time they required trimming every four or five weeks.

* 'On Inhibition,' West Riding Reports, 1874.
† 'Sanity and Insanity,' p. 135.

A few words on the foundations of consciousness will enable us to comprehend better its impairment or abrogation in the advanced stages of hypnosis. Its physical basis depends, first, on the connection of the highest layers of the cortex with the other parts of the nervous system; and, secondly, on the connection of the highest centres with each other. So that, as Professor Sir Michael Foster says,* consciousness, volition, and other psychical processes are not the functions of the cortex, but functions of its connection with other parts of the nervous system. He asks what would happen if, while the cortex remained healthy, afferent impulses were no longer conveyed to it ; and he answers that lethargy with suspension of all psychical processes would be the result. He supports this theory by citing a remarkable case—that of a man, who, being deaf, and blind of one eye, became, in addition, affected with complete tactile and general anæsthesia, and anosmia. His only connection with ' the life of relation ' was through the one sense which remained in functional activity, and when the eye was kept closed he soon passed into a condition of lethargy. Dr. Macfarlane, in his book ' Insomnia and its Therapeutics,' quotes a somewhat similar case—that of a girl, aged sixteen, whose skin and mucous membrane became completely anæsthetic, so that she failed to perceive the application of violent stimuli to them. At the same time she lost the muscular sense and became entirely dependent on her sight and hearing for her relationship with the outer world. Here again it happened that closing these two avenues of sense resulted in the rapid production of sleep. She could be aroused from this by stimuli acting on these senses, and she also used to awake spontaneously after a time if left to herself. These cases form an interesting antithesis to that of Laura Bridgman, who not only possessed one sense (that of touch) very abnormally developed, but also enjoyed an unimpaired cœnesthesis, so that the cortex of her brain was being constantly acted upon by healthy impulses.

* ' Physiology,' vol. iii., p. 117.

She did not, therefore, fall into lethargy when the tactile sense was not in use, but slept in the same way as ordinary persons.

The condition of lethargy into which Sir M. Foster's patient fell is closely imitated by the completely inert state assumed by certain hypnotized persons, especially chronic epileptics. They become perfectly lethargic, insensible to pain, and deaf to the loudest noises. They are not susceptible to suggestion, and can be aroused from a state resembling coma only with considerable difficulty. Dr. Habgood showed me several such cases at Banstead Asylum, and I have seen the condition induced in one of my private patients, a confirmed epileptic. In consequence of the impossibility of establishing rapport with these patients, I imagine that hypnotism would fail to benefit them.*

Consciousness depends, then, on the activity of the senses, the conveyance of their impressions to the highest centres, and the association of these highest centres with each other. Anything which interferes with one or other of these conditions will weaken or destroy it in proportion to the amount of interference. In ordinary hypnosis we find the facts exactly bear out this theory; for sensory anæsthesia, deadening of the senses, benumbing of the faculties, and impairment of consciousness proceed *pari passu*, and maintain a relative connection. But the cœnesthesis, or subjective consciousness, on which to a large extent depends the *ego*, or personality, is the last part of the organization to be affected.†

* Those subjects evidently hear and notice nothing; but there is another class of subjects whose conduct in the hypnotized state is exceptional. I have hypnotized three or four so-called 'mediums'—not professional ones—and find they refuse to accept suggestions, even when profoundly hypnotized. On the contrary, one lady, Mrs. Hans Spoer, takes the upper hand, often dictating and suggesting our conduct to us. I imagine this is largely due to preconceived ideas and auto-suggestion; but it is a striking phenomenon, and would disconcert an inexperienced investigator.

† Individuality depends upon continuous memory. Several cases have been reported in the newspapers lately of men and

There is another factor in vivid consciousness. Not only must the afferent impulses from the senses and the internal organs be received by the highest centres, but the efferent impulses in response to them must be vigorous and of high tension. Vivid consciousness only exists when nervous impulses are sent through new or little-used channels, and automatism prevails when the passage of nerve energy is only through thoroughly organized tracts.

In ordinary hypnosis it is the well-worn channels which are traversed, and therefore the actions performed during this state will tend to be those habitual with the subject or at least in keeping with his character and temperament.

This point has an important bearing on the question of the employment of hypnotic suggestion for criminal purposes, and also on the possibility of using it in the reformation of bad characters. I think we may infer that hypnotism will rarely enable us to convert the hopelessly bad, but that it may be used to influence character by developing latent good and suppressing evil tendencies. It is possible, however, that by continued suggestion new channels may be formed, new tastes established, and old tracts inhibited, and eventually closed and abolished.

It is a natural corollary that when consciousness is weakened or abolished memory will be correspondingly vague and uncertain, or altogether wanting; for memory depends upon the vividness of impressions, and their arrangement and association.

Some opponents of hypnotism have nicknamed it ' tee-total intoxication '; but the analogy between it and the

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women who have been found by the police wandering about aimlessly and unable to give an account of themselves. There has been a complete lapse of memory, and consequent loss of individuality. In some cases the 'stream of consciousness' has resumed its equal flow, and the patient has recovered his identity. In other cases there is a complete hiatus; the past continues blotted out, and he has literally to begin life again. Most of these cases are allied to epilepsy, but they may be the result of concussion of the brain, as in that of the Rev. Mr. Hanna. Hypnotism would probably restore the memory of the past, as it did in the cases of double personality referred to on p. 103 *et seq.*

effects of alcohol is not very apparent. The drunken man is to a certain extent receptive of suggestion, and it is easy to foist delusions upon him, which would be rejected were he sober. The effects of alcohol show themselves in a somewhat different order to those of hypnotism. In the former we have the nervous system involved in the inverse order of its evolution, and the first part to suffer is that concerned in the highest psychical processes—memory, will, judgment, etc. In the lighter grades of hypnotism we do not find the psychical functions so much affected as those of motion and sensation; and it is common to meet with a patient who is quite unable to open his eyes or put down his arm, if told he cannot, in perfect enjoyment of all the highest mental faculties. I have frequently tried to hypnotize intoxicated persons, but have never succeeded unless the patient had been previously hypnotized. On the other hand, chronic indulgence in alcohol seems to somewhat favour the hypnotic process.

Sir W. Gowers* has examined the subject of hypnotic catalepsy, and has published his views concerning it. He supposes that hypnotism induces such a change in the functional state of the brain that the lower cortical mechanism is cut off from the influence of the higher centres which subserve mental processes as well as exercise control over those below. The inhibition of the highest implies, as has been shown, the uncontrolled and exaggerated action of the lower or motor areas, for muscular relaxation or balance depends upon the equal functioning of the inhibitory or higher centres and the excitor or lower ones, in the same way as regular action of the heart depends upon the inhibition of the vagus balancing the excitation of the cardiac ganglia. The inhibition of the highest centres in hypnosis explains why the muscular movements and reflexes are exaggerated and at the same time unattended by consciousness. In the same way, the movements of a paralyzed limb, though

* *Lancet*, May 31, 1890.

they may be excessive, are not accompanied by psychical processes.

In the lighter grades of hypnosis there are psychical accompaniments, and the patient knows the limb is being moved, but is unable to prevent it, or can only do so by making great efforts. In the more advanced stages he loses all, or nearly all, sensation in the limb when it is moved by the operator, so that he often says that it ' seems to no longer belong to him ' (hypotaxis).

The analgesia of profound hypnosis is easily explained. It is sometimes more apparent than real, and then resembles that of incomplete narcosis. The subject suffers at the time, but on awaking has forgotten the circumstance. If hypnotized again and questioned, he will say that he felt the pain, but not sufficiently to cause him to shake off the lethargy which oppressed him. But in many cases there is absolute anæsthesia, and the patient is completely ignorant of what is being done to him. We know that anæsthesia may be produced in three ways—by acting on the arrangements of the highest centres, so as to cause cessation of their functions; by acting on the peripheral endings of nerves, and destroying their irritability; and by destruction or inhibition of the tract conveying sensation from the periphery to the brain. Chloroform acts in the first manner by setting up chemical changes in the brain cells, and hypnotism influences the same nervous arrangements by dynamic inhibition of the molecular activity of the cells. Cocain is an anæsthetic of the second class; and in poisoning by curara, and in the cutaneous anæsthesia of locomotor ataxy, we see the third cause at work. The anæsthesia produced by suggestion alone, as in the cases referred to on pp. 81, 215, can be explained by supposing that the centres of tactile sensation—which Ferrier localizes in the hippocampal region and the neighbouring temporo-sphenoidal convolutions, where also probably painful sensations are received (Lauder Brunton)—are put out of action by some inhibitory action akin to that which

obtains in the local anæsthesia so common in hysteria, and which probably proceeds from some irritation of distal origin acting as an inhibitory influence. The sensation of pain is due to some condition of the cerebrum itself, and is caused by the arrival at the highest centres of intense afferent currents from the seat of injury. Liébeault supposes that in perfect health there is an equilibrium in the distribution of nervous force, which is upset in disease. Disease is accompanied by either excess or deficiency of nerve energy in the centres innervating the affected organs, and hypnotism enables us to check and correct this disarrangement. This theory is not without support, for we frequently see excessive and irregular action in one organ, associated with deficient action in others in the same subject. Centres are constantly discharging their energy through the most traversed channels, and nerve energy is being sent to the organs which have already absorbed most of it—*e.g.*, an uncontrolled and excessive nerve influence is constantly being sent along the nerve tract concerned with the movement of a limb in hysterical contraction. Hypnotism may be supposed to act in such a case by enabling us, through suggestion, to divert or transform the nerve energy which is thus being misdirected. Professor William McDougall, of Oxford, the eminent psychologist, is doing much original research in the field of hypnotism, and he gives this theory the latest scientific expression thus: 'By withdrawing the nervous current from a much overworked or unduly irritable nervous centre or bodily organ, and by isolating it through induction of a relative dissociation of the centre, rest may be secured and a bad habit of over-action may be suspended, as, *e.g.*, in neuralgia; while by repeatedly directing a powerful stream of innervation through some other channel a too sluggish organ—*e.g.*, the bowel in constipation—may be brought back to action and healthy functioning.'*

* Address delivered to the Psycho-Medical Society, and published in *Brain*, 1908.

Dr. McDougall supposes that the nervous system consists of a series of arcs arranged in dispositions or systems associated according to heredity and habit. The cortical centres are being continually gently stimulated by the arrival from the sensory nerves of freed nervous energy or neurokyme (Oscar Vogt). In health and under normal conditions, there is an equable and moderate dissipation of this neurokyme through all the organs and tissues making our cœnesthesis or systemic consciousness, and constituting that state of perfect health which is characterized by a sense of general well-being without undue consciousness of any one organ. This state of equilibrium explains the state of some happy individuals who say they do not know what it is to be ill, and of other unhappy ones who never appreciate good health until they lose it.

Whatever theory we may adopt as to the ultimate causation of the hypnotic state—and theories are almost as numerous as writers on the subject—we at least know that its phenomena are of subjective origin, and that they depend upon the inhibition and dynamogenesis of some centres, and the disconnection of others which ordinarily act in association.

How this dissociation is effected is of course a point of immense interest, and is, in fact, the crux of the whole matter. Its rationale must remain a matter of theory, as it depends on changes of the most subtle nature. But we know at least as much about the action of hypnotism as we do about that of many drugs which we use every day. It probably depends upon intracellular changes in the arrangements of molecules, whereby the discharge of nerve energy is prevented. The clogging of these molecules, and their consequent failure to respond to stimuli, through the ingestion of chloroform and other drugs, their excessive stimulation by coffee or small quantities of alcohol or opium, and their abnormal stimulation by belladonna or Indian hemp, belong to a different order of events. Natural sleep remains the closest analogue to hypnosis; but in sleep the inhibition extends to all the centres and

their functions, and cannot be in part overcome by verbal suggestion; this is the important point of difference between the two states. Moreover, as we have seen, not only can the inhibitory influence be exerted in any direction we wish by verbal suggestion, but its correlative condition, dynamogenesis, can be treated in the same way. The rapid and even instantaneous induction of hypnosis in 'good subjects' can be explained by the setting up of a nerve habit, so that on the exhibition of the accustomed stimulus the molecules fall at once into their former combinations. I have already said that for this reason we should be careful to make the exciting cause a combination of circumstances which would not be likely to occur spontaneously. The tendency of the sequence of events to repeat themselves on the application of the accustomed stimulus is often seen in hypnosis. If on the occasion of the first hypnotization the patient's arm has been fixed in a certain attitude at the moment the process was completed, it is very probable that the arm will spontaneously assume the same attitude at each subsequent sitting. In fact, the position will become an integral part of the process, unless the impression is removed by suggestion.

According to the school of Nancy, suggestion is the key to the whole position. By it the patient is hypnotized, and without it he lies like a log, inert in mind and body. By it one centre can be made to act independently of others, and can be thrown into functional activity without the corresponding actions of those ordinarily associated with it. Thus, connections advantageous to the organism can be formed, and unfavourable associations can be modified or broken off.

The state of the subject lying passive and unacted upon by suggestion very closely resembles natural sleep. The breathing becomes slow and regular, the pulse slower and more full, the pupils contract and the eyeballs turn upwards. There is generally relaxation of all the muscles, as in sleep, and the arm, if raised, falls at once, unless

retained in its place by suggestion. Ophthalmoscopic examination of the retina shows neither anæmia nor congestion. If a state of profound hypnosis is kept up continuously for several days or weeks, as has sometimes been done, changes are said to occur in the urine. The chief of these has been called 'inverted formula of the phosphates,' the relative proportion between the earthy and alkaline phosphates becoming changed. Dr. A. Voisin kept several patients who were subject to periodic attacks of insanity in the hypnotic state for from fifteen to thirty days,* and he and Dr. Harant carefully collected and examined the urine passed before and during hypnosis. They found this inversion of proportion the only characteristic difference (*vide* table, p. 286).

But the amount of urea, fixed residue, and phosphoric acid were all slightly increased, thus justifying him in stating that in such cases the nutritive and eliminative function were better performed in the hypnotic than in the waking state.

Voisin conducted these experiments in consequence of a paper read before the Académie des Sciences by Dr. Gilles de la Tourette, in which that opponent of the Nancy school stated the results of experiments he had made on some hysterical patients and on some subjects in Charcot's stages of hypnosis. He also found the ratio of earthy phosphates to that of the alkaline phosphates inverted from the normal proportion of 1 to 3 to 1 to 2, and sometimes 1 to 1. He, moreover, found the quantity of urea, phosphates, and fixed residue diminished in both hysteria and hypnosis, as well as diminution in the quantity of urine passed, and he therefore concluded that the hypnotic state is a hysterical neurosis, and that it is attended with serious disturbance of nutrition. Here again we see the antagonism between the schools of Paris and Nancy, and in this case it would certainly seem that reason is on the side of the latter, for whereas Gilles de

* *Revue de l'Hypnotisme*, March, 1891.

Dates.		Quantity.	Urea.	Residue.	Phosphates.			Proportion of Alkaline to Earthy Phosphates.
					Total.	Alkaline.	Earthy.	
May 23	Hypnotic sleep ..	1200cc	27g 8	50g 32	1g 80	1g 25	0g 55	44 to 100
,, 24	—	1000	10 62	23 30	0 61	0 40	0 21	52 ,, 100
,, 25	—	875	15 60	28 70	1 32	0 43	0 49	59 ,, 100
Mean	—	**1025**	**18 00**	**34 1**	**1 24**			**51 ,, 100**
June 4	—	1750	21 10	55 04	1 26	0 69	0 57	83 ,, 100
,, 5	—	1650	13 20	46 13	1 34	0 95	0 39	42 ,, 100
,, 6	—	1200	20 61	44 73	1 67	1 06	0 57	53 ,, 100
Mean	—	**1533**	**18 3**	**48 6**	**1 42**			**59 ,, 100**
June 17	—	1200	16 21	42 00	1 71	1 34	0 37	27 ,, 100
,, 18	—	1900	19 00	57 60	1 67	1 30	0 37	30 ,, 100
,, 19	—	1500	18 54	59 40	1 47	0 98	0 49	50 ,, 100
Mean	—	**1533**	**18 00**	**53 00**	**16 1**			**35 ,, 100**
July 1	Normal state ..	750	9 12	30 00	0 38	0 105	0 275	261 ,, 100
,, 2	—	1000	10 00	32 62	0 43	0 32	0 11	34 ,, 100
,, 18	—	1200	13 23	48 00	1 14	0 82	0 34	41 ,, 100
,, 19	—	1100	20 00	51 2	1 81	1 29	0 52	40 ,, 100
Mean	—	**1012**	**13 08**	**40 45**	**0 94**			**35 ,, 100** for the last three days.

Mean Total.		
	Sleep.	Normal State.
Quantity ..	1363cc	10 12cc
Urea ..	18g 1	13 08
Residue ..	45 2	40 45
Phosphates	14 9	0 94
Proportion of alkaline to earthy phosphates	59 to 100	35 to 100

la Tourette's experiment extended only over a few hours, that of Voisin extended, as we have seen, over weeks. The experiments of the former were, as was generally the case in Paris, made upon hysterical subjects who were hypnotized; it was therefore natural that the secretion should partake of the characters of hysterical urine. Voisin's figures also lose much of their value in consequence of his subjects being in a state of mental disease, so that experiments on healthy persons are wanted to decide this point.

And this brings me to the vexed point whether hypnosis is pathological, and a neurosis, as was contended by Charcot, or physiological, and even indicative of perfect mental health, as is asserted by Bernheim, Voisin, Forel, Déjerine, and others. I have little doubt myself but that *le grande hypnotisme* of Charcot, when it occurs spontaneously, is a distinct neurosis of the hysterical type, and that many of the phenomena of advanced hypnosis are only obtainable in subjects of neurotic temperament. But that all people who have been hypnotized, or might be hypnotized, are hysterical or neurotic would be to so classify the great majority of mankind.

Dr. Buzzard says that most brain-workers and men of energy are more or less neurotic, and that the word should not carry the reproach with which it is sometimes associated. Even if most brain-workers are neurotic, one cannot so characterize agricultural labourers, soldiers, or sailors, and we know that among them are often found the best subjects for hypnotic experiments.

A most masterly and judicial exposition of hypnotism is contributed by Professor Tamburini, of Modena, who impartially holds the balance between the theories of Bernheim and those of Charcot. He and Dr. Seppilli experimented on a hystero-epileptic patient, and published their notes on the case in 1882. At that time the important part now assigned to suggestion was not fully recognized, and in dealing with experiments made more than twenty years ago one has to guard against the possible

invalidation of the facts brought forward by unintentional suggestion. Tamburini, however, is positive on this point, for he approached the subject in a most sceptical spirit, and under the impression that the patient's unconsciousness was merely simulated. But he obtained all the phenomena described by Charcot at once, without difficulty, and without suggestion being possible. The further experiments of Vizioli, Grocco, and Lombroso in Italy fully confirm his results, and make it impossible to doubt that the stages described by Charcot are real somatic phenomena occurring in certain individuals. Tamburini, however, traverses Charcot's assertion that such phenomena are characteristic of all cases of *le grande hypnotisme*, and contends that they are rare accompaniments of hysteria in hypnotized subjects of the hystero-epileptic type. Tamburini considers that these somatic phenomena are not obtainable in their entirety even by means of suggestion in ordinary hypnotized subjects, nor even in the majority of hysterical subjects. Hypnotism merely accentuates and brings into prominence the characteristics of the patient, both physical and psychical, whether they be undeveloped or suppressed. To enforce this theory, he cites cases where Charcot's phenomena have occurred in hystero-epileptic subjects in the waking state, just as in a few rare instances stigmata have been spontaneously produced without hypnotism. Hypnotism, by cutting off the life of relation, greatly facilitates the production of these accompaniments of extreme hysteria.*

He sums up the condition seen in the three stages as hyperexcitability of the nervous centres, which shows itself in different ways, according to the nature, intensity, and duration of the stimulus applied. Hypnotism, in fact, increases the reflex excitability of the nervous centres, which is always abnormally present in hysterical persons, and in these cases it practically induces an attack of *la grande hystérie*, complicated with hypnotic phenomena.

* *Riv. Speriment.*, vol. xvi.

Tamburini, therefore, considers Charcot's stages as not characteristic of hypnotism, but as merely illustrating the only essential features of the condition—viz., increased susceptibility to suggestion and increased reflex excitability. The stages of hypnosis he considers as only a form of classification, such as we might adopt in speaking of the relative profundity of natural sleep.

It follows, from what he has written, that Tamburini refuses to regard hypnotism as pathological or a neurosis, but he considers it a psychical state, which may be induced in healthy persons, and which is as varied in its manifestations as are the temperaments and constitutions of the subjects.

Braid found increased action of the heart with acceleration of the pulse, and he therefore warned experimenters to be careful with subjects in whom heart trouble was suspected. Tamburini and Seppilli, in their experiments on hysterical subjects hypnotized by the method of fixation, got similar results, which they have very carefully recorded. They found that in the stages of lethargy (Charcot) the tracing tends to rise progressively, whereas in catalepsy the reverse is the case. This shows that in the former state the vessels undergo dilatation, with consequent increased volume of the pulse, whereas in catalepsy they progressively contract. In somnambulism the condition approaches closely that observed in lethargy. The volume of the pulse augmented in the passage from the waking to the hypnotic state, and the changes indicated by the sphygmograph in the transition from one state to another, were instantaneous.

In the profounder states of hypnosis I have found nearly constantly present a tonic contraction of the capillaries and smaller arteries, so that wounds bleed less freely than in the waking state, and it is often possible—as is sometimes shown in platform experiments—to make a considerable puncture without drawing blood. This condition of contraction is also present in hysterical anæsthesia.

The phenomena observed in the respiratory sphere are exactly what we should expect. Tamburini and Seppilli find that when hypnosis is induced by fixation of the eyes disturbance of rhythm commences at once; and as long as the subject's attention is fixed it is quick and shallow, or it may even intermit or cease entirely for as long as a minute. But invasion of sleep is always marked by a profound inspiration. During lethargy the breathing is deep, becomes slower and slower, and tends to be accompanied by stertor. When catalepsy is induced by opening the eyes, there is an immediate arrest of respiratory movement—at whatever stage it has reached—and this suspension may last a minute or longer. The breathing then becomes of peculiar character and rhythm, inspiration being slow, and expiration still slower. In somnambulism the character of the respiration partakes more of the character of that seen in lethargy, but is somewhat more irregular. During natural sleep, as in the waking state, there exists a rhythm between the movement of the chest and abdomen in respiration, but Gilles de la Tourette states that in hypnosis this rhythm is altered, and that the movements are no longer associated, and may even become antagonistic (Dict. des Sciences Méd., ' Hypnotisme '). In reading Gilles de la Tourette's writings on hypnotism we must remember that he refers to experiments on the most hysterical subjects, and it is well to bear in mind Preyer's warning against confusing *post hoc* with *propter hoc* symptoms.

Preyer remarks that the disturbance in the circulation and respiration noticed by some observers does not depend upon the hypnotic state, but is the result of the nervous stimuli used, whether visual, tactile, or auditory; and in support of this contention he maintains that persons in the waking state exposed to similar sensory stimulation will exhibit the same phenomena. They are, in fact, the result of inhibition of the respiratory centre, producing shallow and rapid breathing; and of the regulating circulatory centres, causing increased rapidity of the heart's

action, with heightened arterial tension from vasomotor paralysis. Forel, contrasting the flexible catalepsy seen in some forms of insanity with hypnotic catalepsy, attributes the latter to temporary cortical hyperæmia and the former to pathological œdema.

When hypnosis has been induced by simple verbal suggestion without any special sensory excitation, no such alteration of the pulse and respiratory rhythm is observable; and it is also seen, after the patient has rested a few minutes in a state of hypnotic lethargy induced by fixation, that the breathing and pulse assume the character found in ordinary sleep. Tamburini, therefore, considers that the respiratory and circulatory symptoms observable in Charcot's stages of hypnotism are simply manifestations of the conditions characteristic of this state—general increased muscular tonicity with ischæmia.

It would thus appear that the principal Italian investigators are fairly in accord as to the phenomena of hypnosis, only that Morselli denies the possibility of Charcot's stages occurring spontaneously, while Tamburini asserts that he has seen them so occur in exceptional cases. I have not yet come across a case in which Charcot's stages have been producible, but I believe that such cases exist. Morselli's experiments are so full and graphic that I reproduce them as being thoroughly illustrative of the effect suggestion in the hypnotic state has upon the heart and respiration. My own experiments, as far as they have gone, are thoroughly corroborative of them.

The subject of these experiments was a healthy young girl presenting no signs of hysteria, unacted upon by magnets, and not susceptible to Charcot's stages. She was always hypnotized by Professor Morselli or Dr. Tanzi by suggestion alone. From the first she fell into a state of profound trance, and was extremely susceptible to suggestion. The respiration was measured with Marey's pneumograph, and the pulse with Musso's aerosphygmograph.

Fig. 1 shows the tracings taken when the subject was awake and in her normal state. They show how the ordinary 'life of relation,' thoughts, ideas, and impressions, influence the rhythm and regularity of the functions.

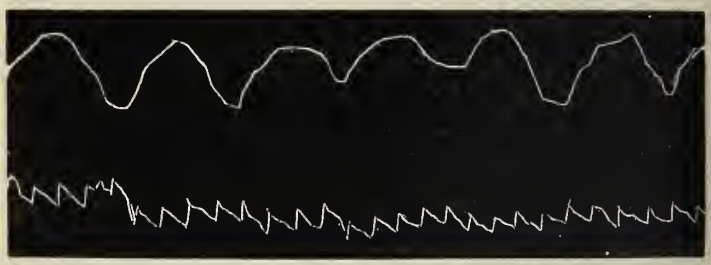

FIG. 1.

Fig. 2 shows the tracings taken when the patient is lying tranquil and in a state of deep trance, unacted upon by the environment, and in a state of complete psychical repose.

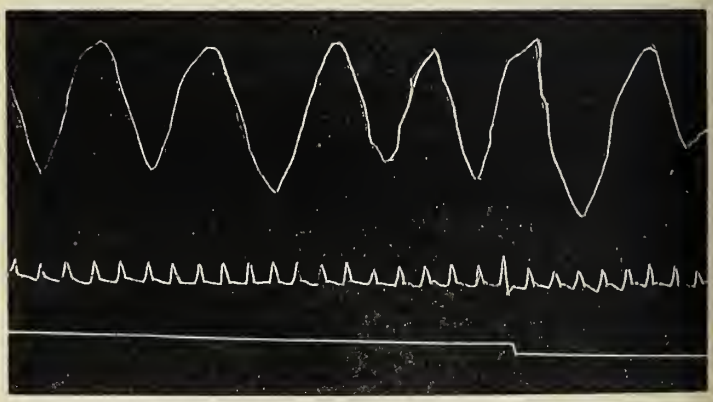

FIG. 2.

In Fig. 3 the subject is told that she is to lift an imaginary weight. At × she raises it, and at × × she is told to put it down. The effect in the tracing is the same as if a real weight were being borne. There is the muscular contraction and preparation for the effort,

followed by relaxation. This supports the theory that the idea is attended by motor accompaniments.

Fig. 4 represents the tracings taken when an attack of hiccough was induced by suggestion.

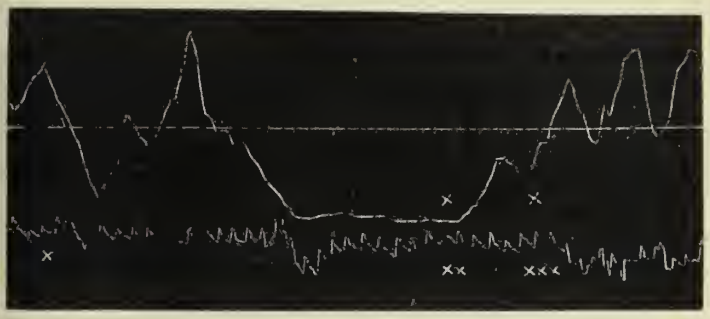

FIG. 3.

Fig. 5 represents the tracings taken when suggestions had been made leading up to a state of stupor, which the experimenters found a close reproduction of those observed in the idiopathic condition.

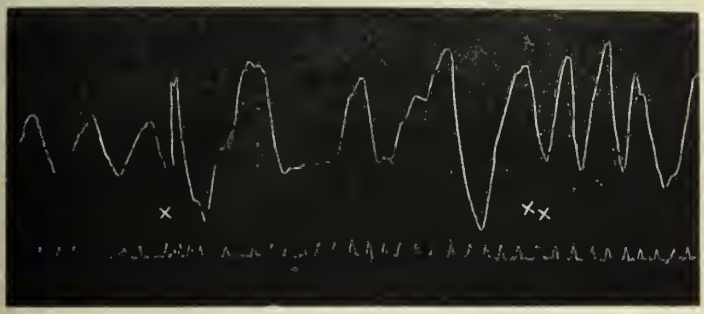

FIG. 4.

It is plain that the only characteristic symptoms of hypnosis in this case were slight increase in volume of the pulse and marked equalization of the respiratory curves. In fact, they are just what we should expect to find in a condition of absolute psychological repose. On the other hand, Charcot, Gilles de la Tourette, Tamburini, and others, as we have seen, describe marked changes in

the phenomena of the circulatory and respiratory functions in the different stages of *le grande hypnotisme*.

Morselli found that by suggesting the symptoms he almost invariably and immediately produced the respiratory curves and pulse tracings belonging to that condition, and he was even able to obtain the characteristic tracings of melancholia, mania, and other mental disorders.*

Preyer says that the rapidity of the pulse increases in some persons and diminishes in others, and directs that great care be taken to avoid error in gauging the blood-pressure. He finds that the pulse-rate frequently falls at first, but on the induction of catalepsy it becomes greatly quickened, and the radial artery is so compressed by

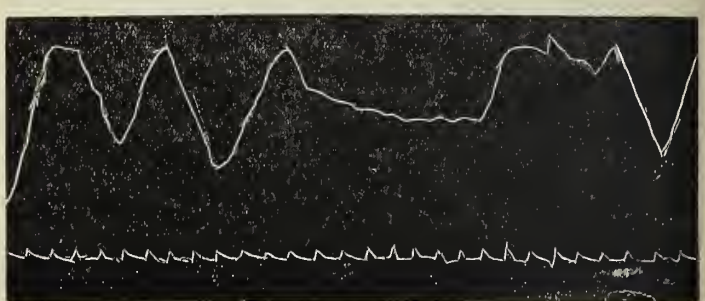

Fig. 5.

muscular constriction that the pulse in it can hardly be felt. He also notices that the capillaries of the face are often very full during hypnosis, though sometimes there is pallor, or alternate pallor and flushing; but he thinks we should be wrong to infer from this that either anæmia or hyperæmia of the brain is necessarily present. Preyer finds that persons who have naturally very dry skins readily perspire in the hypnotic state, and that the head is especially affected in this way. I have very frequently been able to induce perspiration by suggestion in persons who were in only the lighter grades of hypnosis.

Preyer found that after long hypnotic trance the

* 'Contributo sperimentale alla Fisiopsicologia dell' Ipnotismo.' Morsellii e Tanzi, Milan, 1889.

chlorides and phosphates were greatly diminished; but the subject experimented on was markedly hysterical. It is but natural, however, to suppose that prolonged inactivity of the muscles and of psychical functions would be accompanied by greatly diminished waste and metabolism of tissue. Liébeault considers that hypnotic lethargy is a state similar to that assumed by hibernating animals, and he conceives it possible that organic life might be preserved for a very long period if the subject were kept warm and absolutely removed from sensory stimuli. He supposes that respiration would fall to eight, the pulse to thirty, and the excretion of urinary products to something very small. In the case referred to by Voisin the patient was fed as usual, and, as has been seen, her excretions differed but little from the normal waking standard.

CHAPTER X

OTHER CASES OCCURRING IN GENERAL PRACTICE AND SOME FAILURES

Some cases treated by the Author: 1. Insomnia; 2. Writer's Cramp; 3. Tabes Dorsalis; 4. Torticollis; 5. Traumatic Headache; 6. Chronic Diarrhœa; 7. Paroxysmal Sneezing; 8. Tic-douloureux; 9. Symptoms dependent on Organic Heart Disease; 10. Enuresis Nocturna; 11. Gouty Sciatica; 12. Chronic Rheumatism; 13. Nervous Dyspepsia; 14. Amenorrhœa; 15. Functional Dysmenorrhœa; 16. Dipsomania; 17. Dipsomania; 18. Moral Breakdown; 19. Moral Case; 20. Tobacco Habit; 21. Neurasthenia; 22. Alcoholism; 23. Nervous Prostration; 24. Extreme Anæmia; 25. Kleptomania; 26. Mischievous Morbid Impulse; 27. Agoraphobia; 28. Puerperal Insanity; 29. Mania for Washing; 30. Spasmodic Asthma; 31. Morbid Sexuality; 32. Ménière's Disease; 33. Neurasthenia; 34. Diabetes.

I HAVE acted upon the advice of several medical critics in the *Lancet* and other journals, and left out the reports of cases of Bernheim, Dumontpallier, Voisin, and other eminent foreign authors, and rely entirely on my own experience, which is unsensational but satisfactory.

CASE 1.—*Insomnia.**

A. T——, aged thirty-five, electrician, came to me on February 1, 1889, complaining of sleeplessness. It seemed to date from a severe accident from the explosion of a torpedo three years before. He was a man of exceptional mental activity, and the want of sleep had induced much nervous depression and dyspepsia. At whatever time he went to bed he awoke at 3 a.m., and was unable to sleep

* This case and several of those following were published in the *Lancet*, August 24, 1889.

again. He was readily hypnotized, and a slightly lethargic condition was induced. Suggestions were made that he would sleep well that night and would not awake at 3 a.m., but that if he did awake he would be able to sleep again. February 2, he reported that he had awoke the previous night at the usual hour, but had soon dropped off asleep again. The treatment was repeated. February 3, he had been awakened the previous night by a noise in the street about 4 a.m., but had fallen asleep again; on the 5th he reported having had two good nights. One repetition of the treatment completed the cure, and since that time he has remained a good sleeper, getting an average of eight hours' sleep every night. His general health has improved to a corresponding extent.

This case presents several points of interest. Though the patient was only affected to a slight degree by hypnotism, suggestion was successful in breaking a morbid habit of three years' growth in less than a week. Mr. T—— tells me he never lies down during the day, and that while lying down in my consulting-room he was completely conscious, but felt comfortable and disinclined to move. He was able to open his eyes, but they felt somewhat heavy, and he experienced reflex warmth in any part where I placed my hand and 'suggested' it.

Case 2.—*Writer's Cramp.*

Alice N——, clerk, aged twenty-five, came under treatment in March, 1889. She had had much writing to do, and for three years had felt symptoms of loss of power in the right hand and want of control over the pen. She had been treated at a general hospital by galvanism for three months without benefit, and had become so much worse that she had been obliged to leave the desk and engage in other occupations. She was also unable to use the needle for any length of time on account of cramp supervening. After writing two or three lines, she experienced crampy pains in the thumb and forefinger and in the flexor muscles

of the forearm. After a few lines, spasmodic jerking of the thumb was observed, and this increased—together with the pains—to such an extent that in less than a minute the patient declared her inability to hold the pen any longer. There was marked tenderness and soreness on pressure over the median and musculo-spiral nerves. She was hypnotized, and fell into the third stage. In that condition the muscles were rubbed, the joints exercised, and suggestions of improvement made.

After a few minutes' rest the patient was directed to again write, and she found the fatigue and cramp had disappeared and did not return until she had written half a page. She came regularly for treatment three times a week for two months, and at the end of that time was able to return to her original post quite cured.

She was a good example of the second or cataleptic stage (Liébeault), which she never passed beyond. She lay apparently fast asleep, was unable to open the eyes, and retained the arm rigid in any position I placed it. But she remained vividly conscious, and was able to repeat the conversation going on around her, and would laugh, protest, and struggle when told she was unable to move the arm. This is one of many cases of occupation neuroses which I have treated by suggestion. One case was not susceptible to hypnotism, but all the others improved rapidly, and were cured. I should certainly always combine it in these cases with local massage, though I believe at Nancy they use no treatment but verbal suggestion.

Case 3.—*Tabes Dorsalis.**

H. F——, aged forty-seven, a valet, came under treatment in March. He was pale, anæmic, and emaciated, and had an expression and appearance of great depression. His family history was good. He had never drunk to

* This case is published in the *Comptes Rendus* of the first International Congress on Hypnotism.

excess or had syphilis, and was married and had a healthy family. In 1870 he was a soldier in the German army, and was wounded severely in the leg, but made a good recovery. In 1884 he had an attack of what he calls blood-poisoning, but what appears to have been typhoid fever, on the Continent, and he has never been really well since. In 1888 he noticed some failure of sight, and at the same time a numbness of parts of the skin of the back and chest became apparent. His bowels became constipated and only moved by the aid of purgatives, which, however, caused so much colicky pain that the action was always accompanied by vomiting and followed by prostration, which kept him confined to bed for the following twenty-four hours. He suffered from frequent sharp ' lightning ' pains down the arms, and especially the legs, and from neuralgia in the chest and back. His tongue was dry and coated; he had no appetite, and there was great mental depression. In twelve months he had lost 2 stone in weight, was unable to walk more than half a mile, and always felt tired. The pupils were contracted and almost insensible to light, and there was almost complete atrophy of the right optic nerve, with partial atrophy of the left. The reflexes were absent, but there was nothing ataxic in his gait. Extensive patches of local anæsthesia occupied almost the whole of the left chest and back, and also the skin of the upper lip and nose. He was hypnotized, and fell into the third state.

Suggestions were made as to regular and painless action of the bowels, absence of pain, etc. The next day he had a slight motion (the first natural one for three months) without much pain, and felt better generally. Improvement was steady and constant, and in two weeks he was able to walk two or three miles without fatigue, was free from pain and discomfort, and the bowels were regular.

With the exception of a slight relapse, following a bad chill in 1892, he continued fairly well and comfortable until I lost sight of him in 1897. The disease progressed,

but slowly and painlessly. On finding such great success followed suggestions, I was induced to try if they had any influence on his sight, and one morning suggested increased warmth and circulation, followed by improved vision, keeping my fingers over the eyes for three or four minutes. The effect was somewhat surprising, for the following day he was able to read ordinary print at a distance of 6 inches with his left eye, and to distinguish the hands of the clock at 2 feet with his right—a wonderful improvement on his performance the previous day, when he could barely make out large type (D=4) with the left eye, and could not distinguish the nature of any object with the right. But the improvement was only temporary, and in spite of repeated suggestions his sight had relapsed to nearly its former condition within a week. He told me a somewhat similar result followed some months previously the administration of strong doses of strychnine by hypodermic injection. Still, he invariably saw more clearly and distinctly after being hypnotized than before, and whereas his sight was steadily deteriorating previous to this treatment, it afterwards remained stationary for years.*

Probably the explanation of the sudden improvement is that suggestion had powerfully stimulated the healthy nerve elements to abnormal activity, which, however, could not be maintained. I may add that suggestion did little or nothing for the local anæsthesia, but that symptom was greatly modified by a course of suspension under Dr. de Watteville.

This patient was conscious of what went on around him, and by an effort of attention could follow the con-

* This incident throws some light on cases of 'miraculous' recovery of sight which one reads about as occurring at Salvation Army gatherings, etc. In purely hysterical cases no doubt permanent cure is sometimes brought about by suggestion, aided by expectant attention, when the nervous system is thrown off its balance by enthusiasm and by the impressiveness of the surroundings—is, in fact, in a condition analogous to hypnosis. One knows that many of such cases relapse in a very short time when the effect of excessive nervous stimulation subsides.

versation and repeat its purport; but voices sounded indistinct and far off, and he felt very disinclined for exertion. It is the stage of automatic continuative movement, as shown by a simple experiment. If I gave his arms or hands a few turns and told him to go on with the movement, he was unable to stop it, but continued the action indefinitely. He answered questions addressed to him, not only by me, but by bystanders, and he awoke spontaneously in about fifteen minutes. If told to awake at the end of a certain number of minutes, he used to do so almost to a second.

Case 4.—*Torticollis, etc.*

W. T——, aged thirty-four, consulted me in March for rheumatism of the muscles of the neck, shoulders, and back. She was a rheumatic subject, and the present illness dated from two weeks previous, when she had been exposed to wet and cold. She had been unable since that time to dress or undress herself, and the least movement of the head or upper extremities caused pain. The muscles were tender to the touch, but there was no swelling or constitutional disturbance. She was advised to try hypnotism, and with some reluctance, as she said she did not believe in it, she consented. In less than a minute she slept profoundly, and while in the sleep the affected muscles were well rubbed, and the head turned in different directions. Within five minutes she was awakened and told to move her hand and arms freely. This she did without pain, but said there was some stiffness remaining. The stiffness continued until the following morning, when it disappeared and did not return. Faith had nothing to do with this result, for even after the relief was given the patient refused to believe it could be anything but temporary.

This patient appeared entirely unconscious of the conversation going on around her, and of external impressions generally, except such as were rendered apparent to her

by my suggestions. She was insensible to pain, as shown by her perfect tranquillity when I moved her head, a movement she had previously been unable to endure. Her eyeballs were turned up, and the conjunctivæ were nearly insensible to touch, but the pupils readily contracted to light. She took no notice of any sound except my voice, and did not appear to hear if anyone else addressed her unless I told her to answer. Her pulse and respiration were slightly slower than in the waking state, and her aspect generally resembled that of profound natural sleep. The knee-jerk was increased by paresis of the inhibitory centre, until I told her to control it, and then it became less than normal.*

She was not susceptible to post-hypnotic suggestions regarding actions or conduct, nor to suggested hallucination or delusions of the senses.

Case 5.—*Headache following Injury.*

E. H——, post-office clerk, aged thirty-two, came under treatment in July. She had been knocked down by a bicycle three weeks previously, and had fallen with her head against the curbstone. Her back also had been strained, and she had pain in raising the left arm.

She was anæmic, and of neuropathic constitution. Pressure on the occipital and right parietal region increased the pain, which, however, had never left her since the accident. She had been stunned, but not rendered actually unconscious. She was one of the most susceptible subjects I have ever seen, and within half a minute of being told to look at my fingers and go to sleep her eyes closed, and she fell into a stage of profound somnambulism (sixth stage). Her head was gently, and the shoulders somewhat more vigorously, rubbed, and suggestions were made tending to the removal of pain and shock. In ten minutes she was awakened by being told

* Dr. Myers tells me he has seen the knee-jerk apparently suppressed by suggestion in Bernheim's clinique.

to count up to twenty and awake when she got to the end —a good method, as it avoids giving a sudden shock, and leads up to the change of state gradually. She left the house absolutely free from pain, and there has been no relapse. In a profound somnambulist of this type the most advanced phenomena of hypnotism are demonstrable. She is in the same condition, apparently, as case No. 4, but differs from her in being susceptible to post-hypnotic suggestions—negative hallucinations, delusions of the senses, automatic actions, etc. It is important, therefore, to safeguard such a subject by telling her she is not to be hypnotized except for medical purposes, by a medical man, at her own request.

Case 6.—*Chronic Diarrhœa.*

General B——, aged seventy-two, came under hypnotic treatment on April 3. He had previously been attended by me for chronic diarrhœa, but without much effect, and the malady was generally considered quite incurable. It dated from the time of the Crimean War, and since then he had never passed less than four motions a day, and these were always thin and watery. Any excitement or emotion aggravated the condition, and the day previous to my visit he had been moved twelve times. He is a man of exceedingly nervous type, but enjoys fairly good general health for his age. Hypnotism produced very much the same effect on him as on the patient in Case 1 —a slight lethargy. In this state his abdomen was gently rubbed, and the suggestion made that he should in future have but two motions a day, and that they should be properly formed. On April 4 the patient reported three motions during the last twenty-four hours. He was again hypnotized, and the same suggestions were repeated. On the morning of April 5 he passed the first formed motion he had had for over twenty years, and from that time his bowels continued to act regularly twice a day, and the stools were well formed and natural.

Case 7.—*Paroxysmal Sneezing.*

F. H——, thirty-eight, lady's-maid, suffered during the summer of 1888 from hay-fever, and the fits of sneezing continued into the autumn, so that when I saw her on October 4 she told me that every morning on awaking she was seized with a paroxysm, which lasted about an hour, during which time she sneezed about forty times, and discharged copiously from the eyes. In addition to this, for a few days she had suffered from pain after eating, flatulence, and constipation. She was hypnotized, and at once fell into a profound sleep (Liébeault's sixth stage). Her nose was rubbed, and the suggestion made that she should sneeze no more. The stomach was also rubbed, and the suggestion made for the regulation of the digestive functions. There was no need to repeat the operation, for the paroxysmal sneezing ceased forthwith, and the digestion became easy and painless. There has been no relapse.

Case 8.—*Tic-douloureux.*

Mr. B——, aged twenty-nine, was sent to me in 1902. He suffered severely from tic-douloureux of the right trigeminal nerve. The pain had been almost incessant for two years, and was getting worse. It was decided to try hypnotism as a last resource before having recourse to removal of the Gasserian ganglion. He was only slightly hypnotizable, but at once experienced the local warmth referred to as often taking the place of pain. He steadily improved, and was able to return to America cured in three weeks. I heard from him a year later, and the cure was maintained, but shortly after that the pain began to recur. A medical friend who had not much experience hypnotized him and gave considerable relief for a time, but the pain eventually conquered the patient, and he had the Gasserian ganglion removed. Writing six months afterwards, he said, so far, the operation had been a complete success. One hopes it will continue so. The

operation sometimes fails to give relief, as in a case Dr. Savill sent to me. The patient had had the Gasserian ganglion on the right side removed, but after a short period of relief the pain had attacked the other side. I only saw this patient once, and unfortunately failed to hypnotize him. One feels that hypnotism should be tried in such desperate cases before having recourse to a formidable operation. In most cases of recent and simple neuralgia it is very successful.

CASE 9.—*Symptoms dependent on Mitral Disease.*

Miss H——, aged thirty-two, has been under my treatment on and off for several years, and after a long spell of literary work and late hours she consulted me in March, 1889, complaining of palpitation, frontal headache, loss of appetite, nausea, constipation, debility, swelled feet and legs, and especially of attacks of faintness coming on without apparent cause. She has mitral regurgitation consequent on rheumatic fever ten years ago, and her pulse was very weak and rapid (104). She was hypnotized and fell into profound somnambulism. Reduction in the rapidity of the heart's action with increase of force was suggested, and the pulse after a few minutes became reduced to 87, and of firmer character. Suggestions were made corresponding to all her symptoms, and she was allowed to rest for nearly an hour. On awaking she at once said she felt much better. The nausea which had troubled her incessantly for several months had disappeared, and she felt no discomfort from her heart. On going home she slept well that night, and the improvement was maintained the next day. The following day she came to me complaining of a fresh attack of palpitation, and she was again hypnotized, with the same result as before. The operation was repeated three times, with an interval between each visit of three days, and she was then quite free from pain and discomfort. During the hypnotic treatment I purposely refrained from giving

medicine, but afterwards I prescribed strophanthus for the swelling of the feet, which had not improved much under suggestion. This medicine almost completely removed that symptom in a couple of weeks. She had no more attacks of syncope after the first operation.

Case 10.—*Nocturnal Enuresis.*

Thomas L——, aged thirteen, was brought to me in June, 1889, for this trouble. His parents had never succeeded in breaking him of the habit, though they had tried many different modes of treatment. He was fairly well nourished, intelligent, and of nervous temperament. He had no organic lesion of any kind, and the malady evidently depended on functional weakness and bad habit. He was hypnotized daily for six days, and then once a week for six weeks, and he always fell into a profound sleep. He wetted the bed once the first and once the third week, while previously he had rarely gone more than two consecutive nights without doing so. After that there was no return of the trouble, but he wakes up every night about twelve and empties his bladder quite automatically. The boy's future was in danger of being compromised, as his parents were unable to get him into any public school. He went to a large school afterwards and did well. I told him he was to always wake at twelve and leave the bed, and the suggestion acted excellently well.

Case 11.—*Gouty Sciatica.*

Mr. S. R——, a gentleman aged eighty-one, had been for many years a patient of mine, and was subject to attacks of gout, which showed itself in various ways. On this occasion (July) it took the form of sciatica of the right side. There was extreme tenderness along the whole course of the sciatic nerve, and the pain was very severe. The treatment I had previously adopted—colchicum internally and poppy-head fomentations externally—wa

practised, but he continued to suffer much and to be unable to sleep, so on the third day I proposed hypnotism, to which he gave a ready assent. In a few minutes—using verbal suggestion and fixation of the eyes—he went off into a light doze, and in that condition his thigh was well rubbed and absence of pain suggested. The old gentleman remained in a somnolent state for about ten minutes, and awoke feeling somewhat relieved. He slept well that night, and the operation was repeated daily for three days, with the result that he was able to leave his bed within a week, whereas previously he had always been confined to it for three weeks by similar attacks. He was an extremely nervous and sensitive subject.

CASE 12.—*Chronic Rheumatism with Wasting of Muscles.*

Mary T——, aged thirty-four, dressmaker, was sent to me in July, 1889, suffering from very intractable rheumatism of the right shoulder and elbow. It had lasted for three years and caused great pain on moving the arm. The illness had come on gradually and had resisted all treatment. The patient was somewhat anæmic, complained of constipation, and was kept awake at night by the pain. The deltoid and muscles of the arm were a good deal wasted, but gave a normal reaction to electricity.

She at once fell into the third stage of hypnosis, and in this state her shoulder and elbow were rubbed and warmth and absence of pain suggested. She was able on being aroused to move her arm almost to a right angle with her body without pain, which she had not previously been able to accomplish. She remained under treatment for three weeks, and at the end of that time returned to the country absolutely free of pain and able to move the arm freely in any direction.

Case 13.—*Nervous Dyspepsia.*

Miss L——, aged thirty-two, consulted me in February, 1889. She had suffered more or less all her life from indigestion. She was very thin, and her complexion was yellow and spotted with papules of acne. She complained of constant pain over the epigastrium, which was tender on pressure, increased by food, and accompanied with 'sinking,' heartburn, and palpitation. Her circulation was deficient, and she had always cold hands and feet; there was frequent headache and neuralgia, generally in the frontal region. She slept badly at night, and was troubled with uncomfortable dreams. She felt languid and despondent, and had no aptitude for setting to any occupation. Her condition was becoming worse, and she had been under all sorts of medical treatment for her digestion since childhood. Her teeth were sufficiently good for mastication, the bowels were constipated, and the tongue was moist but furred. There were no symptoms pointing to disease of any organ, and it was evident the malady was purely functional.

She was hypnotized, and the second degree of hypnosis was induced. In this condition the stomach and abdomen were rubbed and warmth suggested. Comfortable sleep and improved appetite were promised, together with regular action of the bowels, and general increase of strength and energy. The patient was on very rigorous diet, and this was somewhat modified and enlarged. Improvement in her condition became visible after two or three days, and the treatment was repeated daily for ten days, and then at longer intervals for a month. At the end of that time she was better than she had ever been previously. She slept well, ate with fair appetite, and enjoyed life. The improvement has been maintained, and the morbid condition seems permanently cured.

CASE 14.—*Amenorrhœa.*

E. S——, aged twenty-four, consulted me for various symptoms dependent on amenorrhœa in May, 1889. She was pale, somewhat anæmic, ate and slept fairly well, but suffered from nearly constant frontal headache. She had seen nothing for five months, and thought the cause of this was a chill incurred at the time of the last period. She had taken iron and quinine and used hot baths without effect. She was hypnotized, and at once fell into a profound state of somnambulism. I rubbed the abdomen, and suggested that the period should come on the following week, without pain, and should last three days. These suggestions were repeated daily, with the addition that the day of the week (Friday) was suggested after the second visit. Early on the following Saturday morning the function was re-established, and lasted three days.

CASE 15.—*Functional Dysmenorrhœa.*

A. T——, aged twenty-one, clerk, came under treatment on October 10, 1888. She suffered much from painful menstruation, and has done so since the function became established four years previously. The period was always delayed three or four days, and was scanty and light-coloured. It lasted about three days, and was attended with excessive backache, languor, and frontal headache. She suffered also from gastralgia, constipation, and flatulence. After treating her for some time on general principles, she was hypnotized on March 15, immediately after a period, and at once fell into a profound sleep (Liébeault's sixth stage). Suggestions directed to the painless performance of the digestive and menstrual functions were made, and were repeated two or three times a week for four weeks. The following period appeared on the twenty-ninth day, and was attended by but little pain or inconvenience. She was told to return in three weeks, and suggestions were then made regarding

the next period. This came on twenty-seven days after the last, and continued for four days. It was more abundant and healthy, and perfectly free from pain. Since that time she has continued regular, and there has been no dysmenorrhœa. The digestion soon became painless and natural, and the general health shows great improvement.

Case 16.—*Dipsomania.*

The assertion is sometimes made that women are never cured of alcoholism. This is quite untrue and unjust, especially when applied to women who work. Idle and self-indulgent people, whether men or women, are difficult to cure unless one can reorganize their lives. The following case shows what can be done by hypnotic suggestion when one has good material to work upon:

Mrs. S——, aged forty, married, was sent to me by her doctor in 1899. He had tried everything, but nothing had done any good, he said. Mrs. S—— is a very capable and hard-working woman, supporting her husband as well as herself by teaching music.

She had drifted unconsciously into the alcohol habit, at first taking beer or spirits, when hurried, instead of food, until she came to rely upon them. When made aware of her condition, she found, to her horror, she could not cure herself. She went to her doctor, and he prescribed tonics, etc., without result, so he sent her to me. She proved a very good hypnotic subject, and was soon cured. She has only had one relapse, in 1900, when she had a bad attack of indigestion, and took some advertised nostrum, which consisted largely of alcohol.

The advantage of hypnotic treatment was well shown in this case, for Mrs. S—— was enabled to continue her work without a day's break. For a woman in her position enforced idleness in a retreat would have been disastrous to her character and ruin in her profession.

Case 17.—*Dipsomania.*

Mr. S——, aged fifty, a wealthy American gentleman, filling most important financial positions, was sent to Europe for treatment by Dr. Putnam, of Boston. He first went to Sir Francis Cruise, who laid a very good foundation by giving excellent advice and kindly sympathy; but as he was on the eve of going abroad, he sent him on to me for hypnotic treatment. Mr. S—— proved a good subject, though he never lost consciousness. He stayed three months in England under treatment, and then returned to America. He comes to see me when in London, and reports himself as cured, and with no desire for alcohol. For over ten years he had never gone longer than three months without an attack, and the intervals were getting shorter. He used to begin with moderation, but in a few days would lose all self-control, and drink recklessly until reduced to helplessness by gastro-enteritis. Through that he would be nursed by his wife, and would go into the world again full of good resolutions and confidence, only to follow the same vicious circle in due course.

Mr. S—— was exposed to very severe temptation on his voyage after leaving me, for his artificial teeth, upon which he was dependent, went wrong, and he was unable to eat solid food for several days. So strong is his aversion to alcohol and his fear of it, that, though a religious man, he abstains from Holy Communion on account of the sacramental wine.*

Case 18.—*Moral Breakdown.*

T. L——, aged twenty-one, engineer, was sent to me for treatment by suggestion by a medical friend, as all

* His fear is not altogether unfounded, unfortunately. I know of two cases where the craving for alcohol was revived by the taste of wine at the Sacrament. One of them was reported to me by a well-known Congregational minister, Mr. Mearns; the other by a High-Church lady.

ordinary treatment, medical and surgical, had failed. Since early adolescence he had practised private vices, which had reduced him to a deplorable state of mental and physical weakness. He was easily hypnotized, and fell into the fourth stage of hypnosis. Suggestions were made directed to the reduction of morbid functional activity, and to increase of power of self-control. The patient, who thought himself on the verge of insanity, was a willing patient, and is now, after five months, a completely altered man. He comes to me at gradually lengthening intervals, and in that way any danger of a relapse is obviated until the influence of the habit is absolutely eradicated.

I was enabled to form a good estimate of the value of hypnotic treatment, as I was asked to try it on two brothers who were both terribly addicted to masturbation. The elder one, aged eighteen, proved unhypnotizable after repeated efforts, and the younger, aged fourteen, became somnambulic almost at once.

In the former case the patient has gone from bad to worse, and is now in a lunatic asylum with delusions of persecution. The latter is now married, middle-aged, and fills a responsible post in South Africa. He has had no relapse from the first day he was treated.

Sexual Perversion.—If hypnotism has done nothing more for medical science than bring such melancholy cases as the above within the scope of curative treatment, it would have conferred a lasting benefit on humanity. In even worse cases of perverted sexual instinct it is frequently successful, and Dr. Von Schrenk-Notzing, of Munich, read before the International Congress notes on a case of this kind treated by him with the happiest results. Modern medicine teaches us that these perverted instincts depend upon a hereditary or acquired morbid condition of the brain and spinal cord, and constitute, in fact, a psychical disease. Hypnotic suggestion seems to act by checking excessive functional irritability, and by

developing and bringing into play the inhibitory action of the higher brain centres, which have either not developed or have undergone impairment.

In consequence of the translation into English of Krafft-Ebing's classical work, 'Psychopathia Sexualis,' and his reference to hypnotism as the best, if not the only, method of bringing about the cure of these cases, I have been consulted in quite a number of them—at least twenty-five in fifteen years. With two patients hypnotism was completely successful, and one of these is happily married. In several of the others considerable improvement was effected, but, unfortunately, most of the patients were but indifferent subjects.

A remarkable case (19) is that of a schoolmaster, aged forty. He was a man of education and ability, and had filled good positions in several colonies. His downfall was always due to his indecently assaulting young girls. He showed his faith in hypnotism and his wish to be cured by working his passage to London in 1903 in order to see me. He proved a somnambulist at once, and responded to suggestions most completely. That evening he went out for a walk, and in a dark passage ran against a little girl. For a moment the old temptation assailed him, but it was immediately replaced by a strong inhibitory impulse which drove him rapidly from the spot. That was the last time he felt any morbid desire. He wrote two years later saying that he was filling a good position and had become very fond of little girls in a proper way. A terrible source of danger to society was thus stopped, and a miserable life was reformed. I cannot conceive any other treatment having the least chance of success in such a case.

In treating cases of sexual inversion the hypnosis should be very profound, for one has to alter by suggestion a set of very deeply ingrained instincts and emotions.

Wetterstrand (*op. cit.*, p. 50) reports having cured a case. The patient was a man of thirty-two, and he was

cured in seventeen sittings. He became somnambulic at the first sitting.*

It is absolutely necessary to gain the confidence of the patients in these cases, and they must be carefully watched, as they are notoriously given to deception. But their confidence can be gained by judicious management, and then one is saved from the danger of allowing 'the wish to be father to the thought.'

Several cases of this kind successfully treated by hypnotic suggestion convince me of its efficacy not only in palliating, but in permanently curing, phobias and obsessions of sexual origin, notwithstanding the assertions of Freud and his followers that hypnotism only cloaks the symptoms, and drives the morbid idea deeper into the subconscious.

By all means let us fall back upon the more difficult and serious operation of psycho-analysis if the simple and rapid method of hypnotic suggestion fails, but one does not at once amputate a limb if setting a neglected fracture is all that is required.

The two following cases possess considerable interest, owing to the intellectual attainments of the patients, for they confirm the assertion that hypnotizability may be rather a sign of intellect than the reverse:

Case 20.—*Cure of the Tobacco Habit.*

Dr. X—— is a University professor of eminence, and he came to me in June, 1890, to try what hypnotic suggestion would do to cure him of smoking. He had been an inveterate smoker for twenty years, and had never succeeded in breaking himself of the habit, though he had made frequent attempts. He was highly nervous,

* Doctors, lawyers, and teachers who wish to investigate this rather unsavoury but very important subject will find it fully treated of in Krafft-Ebing's book, and in the recent work by Dr. Havelock Ellis, 'Studies in the Psychology of Sex.' Psycho-analysis should be thought of when hypnotism fails to cure.

and complained of sleeplessness, palpitation, mental irritability, and dyspepsia—all probably due to the very large quantity of tobacco he was consuming in the form of cigarettes. He was easily hypnotized, and fell into the second stage. I suggested that he would cease to care for tobacco, and that he would find himself able to break off the habit without difficulty. The operation was repeated daily for three days, and the patient then discontinued treatment. On making inquiries, I have received a letter from him from which the following is an extract:

'The suggestion was immediate in its effect, so that I felt no craving for the weed, although I had been a habitual smoker for nearly twenty years. Of course I felt very uncomfortable, and my life was very much upset at first by my sudden change in habit; nor did I experience at once all the benefits that I expected from abstinence; so that had I not been under influence I should certainly have relapsed (to my everlasting regret), as I had done whenever I relinquished the habit before being hypnotized. I begin to think that I must now be tobacco-proof, and have not smoked once since I saw you, and am in very much better health.'

This was an admirable case to treat. The patient knew that tobacco was poison to him, and was full of good resolves about giving it up. The will only needed a strong reinforcement from outside, and this was supplied by suggestion in the hypnotic state.

Case 21.—*Neurasthenia.*

Mr. A——, aged twenty-four, has taken a distinguished degree, and is a man of markedly neurotic and intellectual type. He came to me in 1890 suffering from nervousness, sleeplessness, restlessness, and other symptoms of overwork. He was hypnotized at once by fixation of the eyes for about a minute, followed by suggestions, and on his first visit fell into the second stage. He was unable to see me again for three weeks, but he told me

that the effect of the one operation was very marked, and that for three days he felt a new man. Then the effect gradually wore off, and on the occasion of his second visit he was in much the same state as when I saw him first. He was more susceptible the second time, and in the course of the treatment he several times passed into the profounder states, with amnesia on waking. I saw him now every alternate day for two weeks, and then once a week for a month. At the end of this course he reported himself as better than he had ever felt before in his life, and able to read the stiffest books for hours together without fatigue. He sleeps well and wakes refreshed and ready to get up, and is able to play tennis, row, etc., without being overtired.

Case 22.—*Chronic Alcoholism.*

Mr. X——, aged thirty-four, came under treatment in January, 1891. He is a strong, thick-set, muscular, and very plethoric man of highly nervous temperament. He had been a heavy drinker for about ten years, but through domestic and business worries had become much worse, and was in imminent danger of losing his employment and means of livelihood. He had had several attacks of an apoplectiform character, and drinking made him dull, heavy, and lethargic. His general health had suffered, but there was no organic disease. He proved one of the best subjects for hypnotism that I have yet found, for he at once fell into a state of profound trance. The operation was repeated daily for three weeks, and he was then sent to the seaside for a fortnight, preliminary to returning to his business. He went on well for ten days, but then received news from home of a distressing character. Worry of any kind had always driven him to liquor, and in spite of the recentness of the suggestions he again sought the usual solace. For two days he drank large quantities of beer—the worst form of alcohol for him—and he was then brought up to see me. I found him in a very restless, excitable state, with quick, bounding pulse

and throbbing carotids. His face was of a dusky hue, and he complained of dull, heavy pain in the head. On attempting to hypnotize him, I found that, instead of falling into a sound quiet sleep, he passed into a state resembling coma, from which it was difficult to arouse him. The man was evidently on the verge of apoplexy, and to relieve the congestion I at once applied three leeches behind the ears. They bit very freely, and the effect was very striking. In half an hour danger seemed past, and the next day he was almost himself. It looked as if ordinary suggestion alone would fail in this case, and that stronger treatment than usual was required. I therefore began to suggest, not only disinclination for alcohol, but loathing for it. In the presence of my friend Dr. Arthur, I told him that liquor would act as an immediate emetic if he ventured to take it; and to put the efficacy of the suggestion to the proof, I made him drink half a glass of beer a few minutes after he was awakened. He was quite unconscious of the nature of the suggestions I had made, but I found considerable difficulty in getting him to drink the beer, as he said his stomach seemed to turn against it. However, he drank it, and no sooner was it down than he turned to me and asked where he could go, as he felt extremely sick; in a few moments he brought up all the beer he had swallowed. I then again hypnotized him, and told him that he now saw the effect of alcohol upon him, and that similar indulgence would always and at once lead to the same result.

Mr. X—— remained under my observation until the end of March, when he returned to his home. His regular attendant continued the treatment for a few months very successfully, and hypnotized him once a fortnight. Small business worries no longer fretted him as they used to, and the ever-present domestic annoyances were also borne with equanimity. Though such a susceptible subject, I proved to demonstration that, so far from being rendered more liable to be hypnotized by the repeated operations he had undergone at my hands, he

was, on the contrary, less subject to hypnotic influence than an ordinary person. For instance, I requested a medical friend of some experience to try to hypnotize him. Not only did the attempt fail, but the touch and voice of the experimenter assumed a stimulating and irritating character to the feelings of the patient, and rendered sleep, and even rest, out of the question. This was in response to hypnotic suggestions I had previously made, that he was not to allow anyone to hypnotize him but myself and Dr. Smith (his family medical attendant), except at his written request. There was no particular personal element in this or similar cases which have come under my notice, though, of course, it is desirable that in psychical treatment there should be mutual confidence and esteem between patient and doctor. Association of ideas explains the causation of sickness on taking alcohol, just as it explains why raspberry jam will sometimes produce nausea in adults, who, as children, have frequently been given powders in it. The train of ideas once started continues, though circumstances may have completely changed, and the person may never be able to taste that particular preserve, or even to think of it, without experiencing nausea. In the face of such an explanation it seems to me quite wide of the mark to contend, as some do, that the effect of suggestion in these cases is purely personal, and that when the patient goes away the force of suggestion will become weaker, until it ceases any longer to operate as a deterrent. Such has not been my experience, and Dr. Liébeault told me that he possessed records of cases of chronic drunkenness which he had treated over twenty years ago, and which had remained cured.

Total abstinence is not much practised in France, and Liébeault generally allowed his alcoholic patients to drink light wine with their meals. Captain H—— consulted me as to the benefit he was likely to derive from hypnotism in December, 1888; and as I found him a good subject—susceptible to the third degree—and he was going to

France, I advised him to consult Dr. Liébeault. He was hypnotized at Nancy twenty times, told never to drink except with his meals, and then only light wine or beer. His wife was also instructed to hypnotize him and make the necessary suggestions once a week. I frequently see this patient and his friends, and though nearly twenty years have elapsed, he continues a moderate drinker—*i.e.*, he drinks a glass of beer or claret at lunch and dinner. He was a notorious drunkard, and for two years prior to the treatment had hardly ever been sober except under compulsion. Though this line of treatment has been so successful in that case, I do not think it is one to follow—at any rate with Englishmen—and I consider that total abstinence is the only safe course for people who have given way to drink, whatever plan of treatment is employed. The deprivation of alcohol is no infliction to the hypnotic patient, and there is, therefore, no object in not enforcing it.

I have records of another similar case. The patient was a medical student when he came to me in 1893, and was such a slave to alcohol and so hopeless of freeing himself that he contemplated suicide. He determined, however, to try hypnotic treatment first, and proved a good subject. He passed his examinations and bought a practice in the country, which he worked up very successfully. He married well, and after a few years began to drink a little wine. He is now a very prosperous practitioner and a moderate drinker. Dr. Branthwaite, Government Inspector of inebriate retreats, says drunkards cannot be called cured unless they are enabled to drink like ordinary people in moderation; so these two cases would satisfy him. But if such a condition were enacted in every case, I doubt if any system would show five per cent. of cures. Forel, in his usual trenchant style, says it is simply idiotic and harmful to attempt to convert a soaker into a moderate drinker, for by continuing to administer the poison in even small doses you keep up the effect.

Case 23.—*Nervous Prostration.*

Mrs. E——, aged forty-one, came under treatment in January, 1890. She had led an extremely unhappy life for years, on account of the misconduct of her husband, who was a drunkard and a rake. The source of her trouble had been some months removed by his death, and there was no actual cause to keep up her state of ill-health. But the impressions left by years of worry were not removed by simple cessation of the irritation, and Mrs. E—— continued to suffer from sleeplessness, periodic headaches, constipation, loss of appetite, and intense mental depression. She was hypnotized with great difficulty, and only after six attempts had failed. She never lost consciousness, but fell into Liébeault's third stage. The suggestions I made were directed to quieting the nervous apprehensions which assailed her, improving her appetite, and producing natural sleep at night. The suggestions acted perfectly, and the patient began at once to recover her strength and spirits. The mental depression gave place to a feeling of repose and relief, the headaches disappeared, and she became thoroughly well and strong in the course of two months. The improvement has been continued, and the nightmare of years has been thoroughly dissipated by suggestion. The improvement of mental health has been accompanied by at least equal improvement in her physical condition; she has gained weight, and lost the careworn expression which she formerly wore. Altogether she looks at least ten years younger than she did a year ago, and there has been no relapse.

Case 24.—*Extreme Anæmia treated by Hypnotic Suggestion.*

E. A——, aged eighteen, shop assistant, has been under my observation for several years, during which time I have occasionally treated her for various slight complaints. Her father is a drunkard, and her mother is

anæmic and neurotic. The girl never had any severe illness, and was always remarkably bright and lively until the beginning of 1890. Then she began to droop, complained of feeling constantly tired, lost her fine healthy colour, and became sallow and pale; the period, which had been regular for three years, became irregular and scanty, and the bowels were constipated; she became short of breath on exertion, and was unable to lie down in consequence of palpitation. She developed a hæmic murmur at the base, and a souffle under the clavicles; she ceased to have any appetite, and wished to live on a little tea and bread-and-butter. The case was thus a typical one of anæmia, and as such I treated it—first by a course of Blaud's pills alone, and, when that proved ineffectual, by rest and a month at the seaside. She returned, however, in April from the sea, little, if any, better for the change. The amenorrhœa had become established, and there had been no show for over three months. Under these circumstances, I felt justified in advising hypnotism, and, as the patient and her mother agreed, I hypnotized her on May 1. She proved susceptible to the third degree, and I repeated the process three times a week for a month. The result was very striking, for the girl immediately began to improve. First she commenced to eat her food better; then her bowels became regular; next she lost the buzzing in the ears, and was enabled to lie down at night. Her pulse became slower and stronger, and the hæmic murmurs became less audible; and finally, in obedience to repeated suggestions, there was a slight catamenial show in the third week of May. From that time improvement was rapid, and the symptoms and signs of anæmia steadily disappeared. The patient resumed work in June, and has since continued rosy and well. This is one of a considerable number of cases of anæmia which I have treated by hypnotism, generally only after other measures have failed. One has only to try it in these cases to endorse Liébeault's contention, that hypnotic suggestion comes near being specific in the treatment of simple anæmia.

Such patients are nearly always hypnotizable, and are generally very suggestible. I cannot say that I have found improvement or cure so rapid as Dr. Liébeault records in several instances, wherein one or two operations sufficed to bring about a return to health; but I have generally seen improvement set in at once, and continue progressively. Anæmia so often proceeds from some disturbance in nutrition connected with innervation, that one can understand how it may sometimes be reached by mental treatment. In these cases hypnotism acts, I imagine, by placing the system in the best possible state for natural recuperative processes to operate; it certainly speedily improves the assimilative functions and increases the remedial action of iron.

Case 25.—*Kleptomania.*

The name 'kleptomania' excites a smile in many laymen, and they look upon it as a convenient cloak for the larcenies of the well-to-do. A learned judge is reputed to have replied to a counsel who raised this plea that he was there to cure that disease.

But medical men, especially those who have to deal with neurotic and mentally unstable patients, know that the condition constitutes a real entity, and reference to Hack-Tuke's 'Dictionary of Psychological Medicine' shows that there is considerable literature on the subject. Drs. Auguste Voisin and Edgar Bérillon, of Paris, have reported cases which they have successfully treated by hypnotic suggestion, and the following case affords additional evidence in support of this method of treatment:

A. Y——, aged sixteen, is a well-grown and intelligent youth. There is no history of epilepsy or insanity in the family. The patient lived at home until three years ago when he was sent to a large public school. He was reserved with the other boys, and did not join in their sports with any ardour; but he worked well, had a good place in

the school, and was well thought of by the masters and boys. For a year he got on very well, and then his character gradually underwent a change. He became morose and irritable, and when remonstrated with for his failure to learn his lessons, he replied that it was useless to try when he forgot at once what he learned.

At the same time articles of jewellery and books began to be missed, and when their disappearance was traced to him, and his boxes were searched, the lost property was found in them. He denied all knowledge of it, and became intensely excited when accused of theft. He was told that he must be flogged or expelled, and his relations were sent for. They very wisely, seeing his condition, decided that he should leave the school, and he returned to his home. He was now very different to what he had been formerly. He was then bright, frank, and affectionate; now he was sullen, irritable, and untruthful. A new school was found for him, which he attended as a day-scholar, but he had to be removed from it in six weeks, as he not only took things belonging to other boys, but also stole books from shops and bookstalls. At the same time he began to scream and gesticulate in his sleep at night, and his outbursts of passion became uncontrollable. He was taken to a well-known neurologist, who pronounced his case one of moral insanity, advised his removal from home, and his being placed under rigorous discipline. He significantly added that he had known a similar case cured by three months' hard labour! The boy was shortly afterwards brought to me, on March 30, 1894, and I thought it a suitable case for trying hypnotism.

He was hypnotized in the usual way, and at once proved a good subject, though on the first occasion he was not somnambulistic. Suggestions were made that he should sleep quietly at night, that the nervous irritability should pass away, that his memory should improve, and that generally he should return to a normal condition. As a mental exercise and test of memory, he was told on his

third visit, while in a state of trance, that he was to learn an ode of Horace that evening and write it out from memory the following morning. He carried out this suggestion then, and on a subsequent occasion, apparently of his own initiation, for he retained no recollection of my suggestion having prompted it.

He was kept under observation and hypnotized daily for a week, and was then allowed to go out alone, and was hypnotized twice a week for three months.

I did not see him or hypnotize him from July 3 to October 30, but on the latter date I found him well and strong physically, and his family assure me that his former sweetness of disposition is entirely restored. His memory is good, and he no longer talks or gesticulates in his sleep.

There are several points of interest in the case: the alteration of disposition and character, the loss of memory, and the night terrors pointed to an irritative disturbance of the highest cortical centres. His untruthfulness and denial of thefts when confronted with the evidence of them was at least partially dependent on real amnesia, and reminds one of the similar condition often observed after epileptic seizures. Though he was kept under treatment for four months, this length of time did not seem absolutely necessary, for there was an almost immediate removal of the nervous symptoms, and after the first two weeks further hypnotizing was only done as a precautionary measure.

The case was evidently one of degeneration occurring at the age of puberty; and the physiological rest of hypnosis, combined with the stimulating of the appropriate centres by suggestion, brought about a *restitutio ad integrum*, and imparted the needful bias towards healthy action, which tided him over the critical period of adolescence. It is particularly satisfactory to be able to cure a case of this kind speedily and pleasantly, as the method which must be adopted in default of hypnotism is an arduous and not always successful course of disciplinary training, extending, perhaps, over years.

CASE 26.—*Mischievous Morbid Impulse in a Child.*

The following notes present, I think, many points of interest, and illustrate the value of hypnotism in a class of cases not amenable to ordinary treatment:

M. A——, aged thirteen, was brought to me for treatment in December, 1895.

She was the illegitimate child of a prostitute by a German Jew. Both parents, as far as can be gathered, were drunken and dissolute; and the child was adopted when a few days old by a respectable artisan and his wife, who have brought her up as their own.

The child was small for her age, fair and fragile in appearance, pretty and graceful, and looked very superior to the rank of life in which she was placed; she was of highly nervous temperament, but healthy, and had never suffered from any severe illness.

She was intelligent, and stood well in the Board school she attended. She was very fond of music, and played creditably on the violin.

She was brought to me to be hypnotized for a habit of mischief, which showed itself by cutting up clothing and furniture whenever she had an opportunity. Her own clothes, especially when new, were the chief objects for destruction; and I was shown frocks, hats, and boots which had been destroyed in that way. Everything had been tried in the way of cure, from severe punishment to affectionate persuasion, but no effect had been produced, and the habit had persisted for over seven years. She always denied the acts when accused of them, but afterwards used to confess to them and promise amendment with much weeping. She also habitually bit her nails, a habit which Bérillon has shown to be a very important sign of degeneracy, and she often talked in her sleep. In other respects she was a normal and affectionate child.

Her extreme nervousness made her difficult to hypnotize, but on the third visit she fell into a somnambulic

state. Suggestions were then and subsequently made that she would have no desire to do mischief, and that she would be cured. At the same time, suggestions were made that she would sleep quietly at night, and would no longer bite her nails. All the suggestions acted perfectly. The nail-biting and talking in her sleep ceased at once, and there was only one relapse into mischief, when she cut up a new bonnet belonging to her foster-mother in February, 1896. In June, 1896, she had rather a severe attack of scarlet fever, from which she made a good recovery. Menstruation appeared for the first time in November, 1896, and continues normal. There has been no return of the morbid impulses, and the girl is developing rapidly. Later accounts (1904) report her filling satisfactorily a clerkship in the city.

If the child is intelligent I find hypnosis is easily induced, and that the susceptibility to curative suggestion is very marked. On the other hand, when there is deficient intelligence, hypnosis is almost impossible of attainment; and suggestion, according to my experience, can achieve but little.

Case 27.—*Agoraphobia.*

Mary B—— came to me for treatment in October, 1898. Her age is twenty-six, and she is a Board school mistress. She is a strong, healthy-looking woman and a great bicyclist.

Two years ago she began to notice feelings of discomfort when in crowded rooms, and especially in church. These feelings became gradually intensified, until she was unable to go into shops or any place where there were many people. She was an extremely good subject—sixth degree—and at once responded to suggestion. She returned home in two weeks, able to go about like other people, and wrote to me after a year saying there had been no relapse.

CASE 28.—*Puerperal Insanity cured by Hypnotism.*

I was consulted about Mrs. H—— in December, 1906. She had been confined of her third child ten weeks previously, and very soon afterwards had developed insane delusions, which got steadily worse.

She had been at an excellent nursing home in the country, under the best cure and treatment, and her husband brought her up to London to consult a very eminent specialist. This gentleman pronounced the case a bad one, and advised her being placed under restraint, and, as she refused to take food, said forcible feeding would be necessary. He added that hypnotism was out of the question in such a case.

Mr. H——, however, determined to make another effort, and I consented to try hypnotic suggestion, feeling assured it could do no harm even if it failed to do good. I found the patient restless and excited, full of delusions about her husband and children, obstinately refusing all food, and absolutely sleepless except with large doses of veronal, which only gave two or three hours' sleep. The tongue was thickly furred, the breath very offensive, and the motions lienteric and slimy. She was only made to speak with difficulty, and expressed herself as quite hopeless.

After a little reassuring conversation I got her into a quiet state, which gentle pressure on the eyes, combined with passes and verbal suggestion, caused to pass into a slight degree of hypnosis. I then told her very emphatically that she would sleep for an hour, would feel hungry on awaking, and would eat some meat jelly and bread-and-butter. These suggestions were realized, and also those insisting on natural sleep at night.

Steady progress set in at once, and Mrs. H—— was quite restored to mental and bodily health in less than two weeks. There was a slight return of the delusions after a bad night, but suggestion quickly removed the symptoms. The appetite became almost excessive in two or three days, and the digestion was set right almost at once.

Altogether it was one of the most striking and satisfactory cases I have ever attended, and justifies the trial of hypnotism in even desperate mental cases (compare with case on p. 185).

CASE 29.—*Mania for Washing cured by Suggestion.*

Miss C——, aged twenty-one, daughter of a well-known physician, a bright and attractive girl, was brought to me by her father in 1905. The family had moved to London a year before, and the dirtiness of the great city not unnaturally made a great impression on the girl. She became morbidly sensitive about it, and when I saw her she spent nearly half the day in her room washing, especially her hands. As the weather was cold and London water is hard, the hands were in a pitiable condition from chapping, and the general health as well as her spirits were a good deal affected. She was only slightly affected by hypnotism, but suggestions immediately began to counteract the morbid impulses, and after three weeks' treatment she was dismissed quite cured. Her father tells me she continues well.

CASE 30.—*Spasmodic Asthma cured by Hypnotism.*

J. T——, aged thirty-seven, came to me in 1902 having suffered from spasmodic asthma since childhood. Attacks recurred nearly every night, and his general health was much impaired. He was easily hypnotized, but did not lose consciousness. The asthma habit was at once modified by suggestion, and during a fortnight's stay in London he had no severe attack. The crucial time came, of course, with his return home to old conditions and associations, but there was no relapse, and with the exception of an occasional very mild attack when he catches cold, he has kept well.

I have treated a good many cases of asthma, and have had a fair proportion of successes. In some of the cases Sir Almroth Wright's vaccine-therapy has been successful,

and a patient who had undergone both forms of treatment told me the medicine of the future would be confined to psycho-therapy and vaccine-therapy !

I have known very obstinate cases cured by psycho-analysis. We cannot have too many strings to our therapeutic bow for combating this evasive disease, and I recommend the trial of hypnotic suggestion first.

Case 31.—*Morbid Sexuality, etc.*

Mr. N—— was brought to me in 1905 by a medical relative, as he found his cousin's case quite beyond him. And no wonder, for the young man was afflicted with those peculiar perverted sexual ideas Krafft-Ebing calls fetishism. Mr. N—— is a solicitor, of good appearance and manners, of excellent disposition, and first-rate prospects; but his life was ruined by his unhappy tendency, and hypnotic suggestion offered the best chance of cure. He proved a good subject, and suppression of the abnormal desires was suggested. Success was immediate and complete. The patient is cured and contemplates marriage. I kept him under treatment for six months, seeing him about ten times, for it seemed too much to expect that a deep-seated and long-lasting tendency of that kind could be cured at once. I should say that the family history is bad, the father being a general paralytic at sixty, and the mother morbid and hysterical to the last degree. Mr. N—— has been twice to me for other nervous troubles since: first, increased dependence upon and fondness for alcohol; and, secondly, for an insuperable dislike to his profession, and especially for his particular office. For each trouble suggestion has proved curative, and he is now working cheerfully and is a total abstainer. It may be said that his position and health are precarious, and any day may see the development of a new nervous trouble. Granted; but in that case hypnotism will again help him in the future, as it has done in the past. At the worst, Mr. N—— is no worse off than another friend of

mine who was cured of myxœdema a few years ago by thyroid extract, but gets ill again if he leaves off the tabloids for a time. I should feel myself equally culpable if I refused hypnotism in the one case or the thyroid extract in the other. Moreover, in the former case one hopes as the patient gets older his nervous system will become more stable, and that he will be rendered independent of outside help.

Case 32.—*Ménière's Disease, or Aural Vertigo.*

Miss D——, aged fifty, came to me in 1910 complaining of noises in the head, attacks of vertigo followed by vomiting. On several occasions she had fallen in the street, and she was consequently so nervous that she hardly ever went out, and never alone. She had been under the treatment of various doctors and aurists, who had all diagnosed Ménière's disease. In fact, it seemed a typical case, and no hope of cure was held out to her until the auditory nerves were destroyed and she became quite deaf. She proved hypnotizable to the second degree (Liébeault), and at once responded to curative suggestions, and her whole aspect underwent a change. In a month she was able to go out alone, and had lost all traces of disease except slight deafness of the right ear, which seems permanent. I hear from her friends occasionally, and there has been no relapse. This is one of three cases of aural vertigo I have treated successfully. One of these was very striking. The patient was a post-office clerk aged twenty-four. She was more seriously affected than Miss D——, and the attacks often came on in bed in the early morning, when objects seemed to sway and revolve before her eyes. Her case was considered hopeless by several hospital physicians, and she was about to resign her appointment. She quickly responded to hypnotic treatment, returned home, married, and continues well.

Dr. Betts Taplin* has reported similar cases of Ménière's

* *General Practitioner*, December, 1906.

disease cured, and our experience justifies the hope that in hypnotic suggestion we have a cure for this distressing and intractable disease. At any rate it should be tried.

Case 33.—*Neurasthenia.**

Mr. A——, an American lawyer aged forty-five, consulted me in 1904. He had been ill for three years, and attributed his illness to overwork and worry. He had undergone a good deal of treatment of various kinds, and spent his time seeking health and going from one physician to another. He had the usual neurasthenic symptoms, especially constipation, insomnia, dull occipital headache, ' muzziness ' in the head, with loss of power of concentration, defective memory, and mental depression, with distrust of himself and suspicion of other people. The heart shared in the general weakness, and there was breathlessness on exertion, but there was no organic disease discoverable. He readily agreed to try hypnotic treatment, and fortunately at once proved a good subject, falling into the third, or cataleptic, stage of Bernheim. He reacted to the suggestion of warmth when the hand was placed over the epigastrium, and an abundant secretion of saliva followed friction of the parotid glands and suggested increased secretion. He was allowed to rest for an hour lying down in a darkened room, and when aroused he expressed himself as feeling warm all over, and generally braced up mentally and physically. He heard and remembered my suggestions, and they acted well. They were directed towards relief of the symptoms, and more especially to the effect that he should sleep well at night, and have a natural action of the bowels in the morning. He reported himself the next morning as better in every way and full of hope. The treatment was repeated daily for a week, and then twice a week for three weeks, with the result that he then declared himself as quite well, and anxious to return home, resume his work, and relieve his

* *General Practitioner*, January, 1911.

partner, who had been doing it all for nearly three years. He carried out his plans, and I hear from him occasionally to the effect that he is well, and hopes to continue so with reasonable care.*

Case 34.—*Diabetes.*

Dr. Francis, the well-known specialist, has published the following notes:†

'My mother, aged eighty-one years, has suffered for more than thirty years from obstinate constipation. During the last fifteen years she has had glycosuria, and has kept strictly to a diabetic diet. Of late years she has suffered from time to time from a severe paroxysmal cough. During the last few years the constipation had become so serious that it was a grave menace. Almost every conceivable form of treatment was tried, and the most drastic remedies were of but little avail. The glycosuria began as more or less typical diabetes (thirst, wasting, pruritus, carbuncles, etc.), and in spite of a strict diet the amount of sugar remained persistently very high.

'Last October she consulted Dr. Lloyd Tuckey for the constipation, and he treated her by hypnotic suggestion. After the second visit she had a natural motion for the first time for many years. Since then, during the last nine months, the bowels have acted regularly and well, although she has not taken any purgative except a little senna-tea, which she takes at bedtime and was told would be sufficient.

* *British Medical Journal*, December, 1908.

† The relief of constipation in such cases as this by suggestion is of great importance in every way, and should always be aimed at. It inspires the patient with hope and confidence, and makes an excellent start for psychic treatment. I always endeavour to ascertain the cause—*i.e.*, deficiency of secretion, want of power in the muscles of the abdominal wall or intestines, deficient nervous impulse, or a combination of these—and I make corrective suggestions accordingly. The response, as seen and felt on the salivary glands, and as may be inferred from the result on the intestinal secretions, is very marked, as is the evocation of healthy inclination for stool after months, or perhaps years, of inertness.

'In November Dr. Lloyd Tuckey treated her in a similar manner for the cough, which at that time was very distressing, resembling whooping-cough in the violence of the paroxysms. After one treatment the cough entirely disappeared.

'Having met with such success, it was proposed that the glycosuria should be similarly attacked, particularly as the patient suffered from double cataract, and an operation was not considered advisable, on account of the large amount of sugar in the urine.

'In order to test more correctly the value of the treatment, ten quantitative analyses were made by an independent chemist.

'The following are the results; the first analysis was made before the first treatment for the glycosuria, and may be taken as representing the average antecedent condition. The subsequent analyses were made of urine passed on the second day after each treatment. The patient remained on the same diabetic diet throughout.

Date.	Grammes per 100 C.C.
February 27, 1908	8·3
March 6	5·6
March 25	5·3
April 3	8·0
April 16	6·3
June 4	3·12
June 13	1·11
June 18	2·2
June 26	1·4
July 4	0·71

'On July 9 iridectomy was performed by Mr. L. V. Cargill. Healing took place rapidly and without any complication, and the coloboma gives greatly improved vision.'

At the Berlin International Medical Congress Dr. Bérillon was twitted with having only published his successful cases, and he was able to retort that if that was an offence he sinned in good company. The practitioner undoubtedly learns much from his own failures,

but I cannot think that they convey much to others. In hypnotism, as in all other treatments, we meet sometimes with failure and disappointment where success seemed assured. Such a case is the following: A lady, aged thirty-eight, consulted me in November, 1890, for partial hemiplegia of apparently functional origin. Though it had lasted for six years, and all kinds of treatment had been tried in vain, I felt justified in hoping for a good result from hypnotism, especially as the lady was very susceptible and speedily became somnambulic. Suggestions were made with great caution, and she was told that she would become stronger and better daily, and on the seventh day would be able to get out of bed and walk without a stick. Though the suggestion was repeated daily, and the circumstances seemed most favourable, nothing critical happened on the expected day, and the patient still remains partially hemiplegic. Her general health has, however, improved; she has lost her headaches and feels 'more alive.' Her intelligence, which was in the same condition somewhat as her limbs, has greatly benefited, and she has lost a habit she had of letting things fall that she tried to hold.

Probably in this case the disorder has lasted so long that it has become a part of the patient's individuality, and therefore cannot be cured unless something occurs to completely change that; or possibly the case may turn out to be one of those referred to by Dr. Buzzard, when the earlier stages of disseminated spinal sclerosis are masked by hysterical symptoms.*

Though she frequently becomes somnambulic, she does not completely lose touch with the external world, and though anæsthetic and irresponsive to any voice but that of the operator, she will be seen to smile if something very amusing is said in her presence. She does not, therefore, fall into the profound state attained by Dr. Dumontpallier's patient, in which suggestion is all-power-

* The subsequent history and death of this patient proved the case to be one of disseminated sclerosis.

ful, and there is always a degree of unconscious resistance which prevents the suggestions being accepted by the mind and transformed automatically into actions.

Another disappointing case is that of a boy aged ten, who was brought to me to be treated for nocturnal enuresis. He was a natural somnambulist, but hypnotism only induced Liébeault's fourth state. Suggestions were made that he should sleep lightly at night and that he should leave the bed. The suggestion was realized the first night, but completely failed afterwards, and the parents gave up the treatment at the end of a week. I think it very likely that with perseverance and change of method this patient might be cured by suggestion; but it was disappointing not to have succeeded at once in a malady which is claimed by all authorities as affording convincing proof of the efficacy of hypnotism.

Consideration of the following cases may be useful:

1. Mrs. A——, aged forty, came under my care in the beginning of 1890 for intemperance. She had indulged to excess for seven or eight years, and was a confirmed drunkard. Her home was not very happy, and her husband and children were uncongenial. She was naturally a clever woman, but for many years had entirely given up useful employment, and devoted her whole time, when sober, to reading novels. She was in the habit of drinking anything she could get in the way of wine, beer, or spirits, and showed great cunning in procuring them. She had completely lost all interest in life, and had become thoroughly hardened and reckless. My success had been so gratifying that I undertook the case with some confidence, and named three weeks as the time it would probably be necessary to keep her under restraint and in the hands of a nurse. Mrs. A—— proved a good subject, and was influenced to the third degree. Suggestions were made in the direction of loss of craving and dislike for alcohol, and were repeated daily for three weeks. The patient was by that time quite a changed woman, had regained an interest in life,

spoke affectionately of her husband and children, and had altogether softened to a surprising extent. She went away to stay with friends, and during her absence was always bright and cheerful; and though she had easy access to wines and spirits, she showed no inclination for them, but, on the contrary, proclaimed her intention of never touching them again. She returned to her home after being away altogether four weeks, and she continued to keep steady for four or five weeks, during which time she paid me bi-weekly visits. Then I ceased to see her, and soon heard that she had returned to her old ways. This case is a typical one, and I now know the reason hypnotism failed to exert more than a transitory effect. It was a bad case, and the home associations were antagonistic. Instead of keeping her away for only three weeks, she ought to have been under the charge of a nurse for at least three months, with only occasional visits to her home during that time. I have little doubt but that, if this course had been followed, the woman might have returned to her house and been temptation-proof in spite of ennui and opportunity. The change that was effected by three weeks' treatment justifies this inference, and the case is a warning against expecting too rapid results in difficult cases of dipsomania.

The following case is one of the most successful and typical examples of curative hypnotic suggestion I have ever seen; and I record with it the story of a failure:

2. E. M——, aged forty-five, a gentleman in good position, came under treatment in 1891. He had been a dipsomaniac for fifteen years. He used to have periodical bouts of drinking, during which he would disappear from his home and frequent the lowest haunts until brought back, a wreck, by the police. He was easily hypnotized, and success immediately followed on suggestion. With the exception of one slight relapse, he has kept well ever since. In 1901 he brought his son, aged nineteen, to me. The youth had recently fallen into bad company and taken to drink, though most carefully brought up; for the father

and mother were well aware of the dangers of evil heredity, and did their best to counteract them. He proved a good hypnotic subject, and I undertook to treat him, with confidence of success. But suggestion had no effect on him, and he rapidly went from bad to worse, until he was sent abroad, where I suspect he soon drank himself to death. I think this was the saddest and most disappointing case I have seen. One has only the melancholy satisfaction of knowing that no other treatment would have had a chance of success.

3. Mrs. W——, aged thirty, married, and with three children. She has been a patient for several years, and is fairly susceptible to ordinary medical treatment. One symptom, however, has always resisted the usual remedies. There was almost constant pain in the right ovarian region, which was tender on pressure; but examination by a specialist did not reveal anything abnormal, and the case was one, apparently, of ovarian irritation. I proposed hypnotism, and Mrs. W—— consented. She proved susceptible to the third degree, and I hypnotized her six times during the three weeks. She completely lost the pain and tenderness, and though she has had ups and downs the last ten years, this particular symptom has never returned.

4. Mrs. B——, aged thirty-three, married, and with two children. She is of an anxious temperament, and has an invalidish husband who causes her great anxiety. She has a well-marked systolic bruit dependent on mitral regurgitation, following an attack of rheumatic fever thirteen years before. She was very short of breath, had pain and palpitation on exertion, and was so nervous as to be unable to drive in a hansom or use a lift. There were incessant spasmodic movements of the hands, and many other signs of nervous breakdown.

After various remedies, such as bromides, valerian, and digitalis, had been tried without much result, hypnotism was suggested and agreed to. Mrs. B—— was a good subject, though not a somnambulist. The heart's action

became more regular and slower, and the twitching of the hands ceased. The treatment was continued daily for ten days, and the patient was then fairly well. She went abroad with her husband, and I hear she rides, cycles, and goes about generally like a healthy woman. The valvular trouble is, of course, still there, but compensation is good, and the morbid nervous element has been suppressed by suggestion.

Mrs. B—— is one of several ladies who tell me that hypnotic suggestion has increased their courage and enabled them to cycle freely in traffic.

I introduce the following case as a sort of medical curiosity:

5. Miss M——, aged forty-five, an extremely practical and clever woman, mistress of a large school. She is very gouty and rheumatic, but otherwise robust. She came to me first in 1899, suffering from rheumatic pain and stiffness in the right knee, with slight effusion, and writer's cramp of the paralytic variety. She was easily hypnotized, but did not lose consciousness. Suggestion acted immediately and to an extraordinary degree. She was able to walk and move the leg without difficulty almost at once, and the writer's cramp was cured in a few days. The rheumatism has since occasionally returned in other joints, and once it took the form of severe coccygodynia. The effect of suggestion has always been so immediate and curative that one wonders if it has any limits in this particular case. Hard cases are said to make bad law, and excessive suggestibility in too many of our patients might make bad medical practice.

The lady lives a long way from London, and only comes to me when her doctor tells her he has done his best with drugs. So far none of her ailments have resisted hypnotic suggestion, though they have been varied in kind and extend over twelve years. They include, besides, various forms of rheumatism, climacteric flushing, tinnitus aurium, obstinate constipation, acute indigestion, chronic frontal headache, dysuria, sleeplessness, nervous

exhaustion, gouty eczema, and writer's cramp. This case, though, unfortunately, quite exceptional, shows how hypnotism is a veritable panacea with some people.

Even more disappointing than failure of suggestions to take effect are those cases where the treatment is strongly indicated, and yet cannot be applied on account of the insusceptibility of the patient.

A case in point is that of a schoolmaster who consulted me a few years ago on account of a miserable delusion which was wrecking his life. He was under the impression that the boys were always laughing at him, and the struggle he had to contain his anger and maintain his dignity was so intense that it was undermining his health. The idea would probably soon have been removed by suggestion, but, unfortunately, he proved absolutely insusceptible to hypnotism.

A similar case is that of a medical man with a very large poor practice. He is a good-looking man of forty, but he has got the fixed idea that he is hideous and that everyone is laughing at him. He is impelled to suicide, and has entered an asylum as a voluntary boarder. As his condition is largely due to overwork, the rest and freedom from responsibility will probably restore his mental balance; but if he had proved hypnotizable, curative suggestion would have proved a short-cut to cure, and he was certainly justified in trying it.

It has been increasingly brought home to me in the course of many years' practice of hypnotic suggestion that the success of the treatment depends upon the increased receptivity of the patient. This is more apparent in moral than in physical ailments, perhaps because all patients wish to be cured of physical suffering, whereas many do not want to be cured of moral ills, but only to be relieved of their consequences; *e.g.*, I know of no cases more successfully treated than those of drunkenness, but I recall the case of a wealthy man which disappointed and puzzled me until I learnt subsequently that he had always resisted my suggestions of total abstinence—

the only course. His wife had supported and joined him in his plenteous libations of champagne at meals; therefore the adverse home influence rendered my treatment useless. Then I was asked to undertake the case of a youth whose father brought him to me to cure him of excessive cigarette smoking. The young man, who had a weak heart, agreed to cut down his indulgence to six cigarettes a day, but would not consent to entirely give up his habit of smoking, so reluctantly I had to give up the case, and he soon went back to thirty or forty cigarettes a day.

I should have much liked to have helped an exceptionally able medical man who had won high distinction at college and built up a good country practice. Ambition induced him to read for a very difficult qualification, which he failed to obtain. As a result, he formed the idea that he was an ignoramus and unfit to practise his profession. He told all his patients so, and became overwhelmed by his responsibilities in the simplest case. He has had to sell the remains of his practice and take a complete rest abroad.*

One is sometimes asked to employ hypnotism with the object of influencing unfortunate love attractions. Success

* Insane delusions occurring in doctors have, I confess, a weird fascination for me, as one sees in them the struggle between practical and scientific knowledge and diseased mentality. Very striking was the case of a retired army surgeon who consulted me in 1900 about his wife. She thought she was girt about by electric wires, and that the current was turned on especially at night. I found the husband inclined to believe there was 'something in it,' but I was not prepared for an early and urgent summons from the landlady of the lodging-house to which I sent them demanding my immediate attendance. I found the bedroom had been wrecked by the unfortunate pair, as they felt convinced the current passed through the gas-pipes, and they had therefore wrenched these from the walls. He assured me he felt the current, and that feeling was believing.

It is not uncommon for suggestion to act the wrong way, and for the insane to inoculate those in charge of them with their ideas. Recently a clergyman brought his sister to me, telling me she thought herself under the mesmeric control of a neighbour. He added he thought there was 'something in it.' As a matter of fact, the lady was of a certain age, and the gentleman had shown her a little attention, which she misinterpreted.

could hardly be looked for in such cases, even if a medical man were justified in acting without the full consent and knowledge of the person chiefly concerned. I have, however, frequently found hypnotism a valuable means of relief for the mental, moral, and physical sufferings due to disappointed affection.

I have been called upon to treat two cases of 'phantom limb,' after amputation, by hypnotism. The treatment seems to be thoroughly indicated in such cases, and it was a great disappointment to find that neither patient was hypnotizable. The first patient was a gentleman of sixty, whose leg had been amputated a few weeks previously. He had intense pains, which he referred to the missing limb. I made many attempts to hypnotize him, but without result.

The second case was that of a colonial gentleman whose arm had been badly shattered by a gun explosion, and had been amputated at the shoulder. For more than ten years he had suffered greatly, especially in damp weather, and he referred the pain to the thumb and fingers.

He also proved quite insusceptible. But I feel confident that hypnotic suggestion is the ideal treatment in such cases, for it exactly fits the indications. They correspond to hysterical joints, which are so troublesome to deal with. The pain, though referred to the joint or limb, depends upon central irritation, and is caused by the unhealthy condition of the cortical cells functioning the part.

Van Eeden tells me that he has seen a case of phantom limb and epilepsy cured by hypnotic suggestion at the Amsterdam Clinique. The patient had had his arm amputated after an injury, and developed traumatic epilepsy. Each fit was preceded by an aura which took the form of a forcible elevation of the amputated limb, accompanied by intense pain. This is a case in which, if hypnotism had failed, one would have urged trephining, and operation on the arm centre in the cortex.

The theory of nervous action promulgated by Golgi

and Ramón y Cajal throws light upon this condition. They have demonstrated that the neurons form combinations through their branches, or dendrons, not by continuity, but by position. When a nerve current passes from one neuron to another, it does so by their respective dendrons interlocking or embracing, and the current is made in a manner analogous, probably, as Dr. Hedley thinks, to that seen in the coherers of electricians.

When the contact is not complete, no nerve current or impulse can pass, but a nerve cell once serving for the passage of nerve currents undergoes an alteration which allows of a more ready passage of a similar current on a future occasion. Neurons tend to form combinations or 'sets'—to use the language of the compositor—and these 'sets' correspond with habits of thought and their accompanying actions.

Bodily conditions are registered in consciousness, and their physiological expression is the arrangement of the neurons. When the cause of the disturbance of function in a part is removed, the 'set' of the neurons should fall back into its normal position, and pain and discomfort cease to be registered in consciousness; but in some conditions of ill-health the neurons may remain in their abnormal condition, and the subjective symptoms therefore continue.

Thus, in the case of hysterical knee, some injury occurs to the joint, and swelling, stiffness, and tenderness ensue, with pain on movement. These symptoms are registered in consciousness, and a corresponding 'set' of the neurons is the result.

Under ordinary circumstances, as the inflammation subsides the 'set' of the neurons tends to fall back into their old arrangement, which is associated in consciousness with a supple and painless joint. But it sometimes happens that the nervous arrangement does not change with the disappearance of the cause, and the idea of pain and disability continues and becomes fixed in the mind.

Successful treatment must operate centrally by restoring

the neurons to their normal relationship and breaking up their faulty 'setting.' Much depends upon the capacity of change and of disjunction or conjunction in the field of contact. This is termed the plasticity of the neuron. Habit implies increased plasticity, and organic memory depends upon plasticity acquired for the good of the organism. In infancy and youth the connections are less rigidly set than in adult life, and consequently it is easy to direct and modify them.

NOTE.—The following cases further illustrate the use of hypnotic suggestion in general practice: During a recent epidemic of influenza I was called to attend a young woman who, in addition to the usual symptoms, was suffering from congestion of the right lung and erysipelas of the face. She complained very much of frontal headache and pains in the limbs, and had not slept the preceding night. The eyes were completely occluded by the erysipelatous swelling, and she experienced much heat and aching in them. I asked her if she would like to sleep and get rid of some of her pain, and she naturally replied that there was nothing she more desired. The ordinary method was out of the question, as she could see nothing, so I gently stroked her forehead and suggested drowsiness and sleep. This simple process rapidly induced somnolence and tranquillity, followed in less than ten minutes by a deep sleep, which lasted for two hours. The patient awoke greatly relieved by the physiological rest the system had enjoyed, and made a good recovery under the usual remedies. Of course, I do not contend that hypnotism is curative in erysipelas, congestion of the lungs, or any other acute disease; but from a number of experiences similar to the above I know that it quiets the nervous erethism which is so distressing a symptom in many acute cases, and puts the patients into a condition most favourable for recovery and for the action of drugs. I have found it useful as a palliative in cancer and other painful and incurable diseases. The following cases present features of interest:

1. Hystero-epilepsy for five years in a girl aged fourteen. Attacks were caused by touching the region of the right breast (a hysterogenic zone), and were characterized by convulsive movements of the right side. In addition, there were nearly daily attacks of what looked suspiciously like epilepsy, with occasional biting of the tongue, and followed by languor and drowsiness. The girl had been an in-patient at several hospitals, without much benefit. After being hypnotized seven or eight times she began to improve. There is now no longer a hysterogenic zone, and she had no fit of any kind for five months. The catamenia, which had been suppressed for six months, did not, however, reappear, in spite of suggestions made to that effect.

The two last cases I shall give are not examples of brilliant cures, but illustrate the importance of not promising too much from the treatment.

2. Miss H—— has been a chronic invalid almost since childhood. She is forty years of age, and has anchylosis of the right

hip-joint, following hip-joint disease and lateral curvature of the spine. She is of hysterical and melancholy temperament, and her mental powers seem to have atrophied *pari passu* with her disused muscles. A year's perseverance in the treatment has enabled her to find some enjoyment in life; she is able to walk over a mile without much fatigue, and to play the violin for nearly an hour at a time. Previously for some months she had been barely able to move about the house, and it is years since she was able to walk a quarter of a mile. Neither had she been able for a long period to play, partly because of invincible hebetude, and partly from the fatigue attendant on the slightest effort.

3. Miss E—— was sent to me suffering from hysterical right hemiplegia of a year's standing. It came on suddenly after her mother's death, and she had had repeated relapses after apparent improvement. She fell sometimes into the third and sometimes the fourth degree of hypnosis, and in this condition friction was applied to the paretic side, and suggestions made. She improved but slowly, and after twelve operations suffered from a relapse, and was confined to her bed completely helpless for a week. On her return to me I found the right arm and leg much colder than the left, and the reflexes on that side increased. Perseverance in the treatment for three months has produced a decided improvement: the right leg is nearly as warm and strong as the left, and her general health has greatly improved. One would almost have felt justified in expecting more rapidly curative results in this case, and the relapse whilst undergoing treatment was disappointing. It illustrates the point I have so frequently alluded to, that pronouncedly hysterical persons are by no means the best subjects for this treatment.

My appreciation of the efficacy of drugs has been increased since studying hypnotic suggestion; for I have seen on several occasions a properly-selected remedy remove a symptom which suggestion had left untouched. Van Eeden has shown how the beneficial effects of massage and Swedish gymnastics are increased in certain cases by being combined with Liébeault's system.

Curative suggestion, of course, takes many forms. Forel insists upon the importance of keeping nervous and hypochondriacal patients well occupied. As we know, such people lack initiative and are unable to map out their own time to advantage. It is the recognition of this fact that makes the success of many Continental ' cures.' Forel considers the curative effect of much electrical and other treatment as due to suggestion, but he nevertheless urges their importance. Farez (*Revue de l'Hypnotisme*) relates a case of hysterical contraction of the hand in a girl. Though she was a good hypnotic subject, suggestion

alone failed to remove the contraction, but taking sparks from the back of her hand through a static battery cured her, for she said she felt the electrical flames loosening the joints, and the hand gradually opened.

There was a discussion in the *British Medical Journal* in 1906 as to the morality of a surgeon performing a sham operation to satisfy a patient, and the old story was quoted of the lady who thought she had swallowed a green frog, which lived in her stomach and waxed fat by robbing her of her nourishment. I think Trousseau first told the story, and how, after seeing many doctors, she called in one who understood her case. He provided himself with a green frog, which he slipped into the basin required by the emetic he administered. The patient, like so many hypochondriacs, hugged her delusion and hated to part with it; so she replied, when the doctor, pointing to the reptile, said, ' You were right, madam; and there is the cause of your trouble,' ' Ah ! you have only got rid of one; but it has bred in my stomach and left its young there.' ' Impossible,' said the doctor, gravely examining the frog, ' for it is a male.' Dr. Mercier quoted this story to support his contention that it is useless as well as wrong to deceive a patient, even for his own good, for the obsessent idea removed is almost certainly replaced by a new, and perhaps more dangerous, one. But he left out the second half of the story, and, I think, missed the moral, which is, I take it, that the doctor using suggestion should be a man of resource and able to follow the intricate windings of a nervous patient's mind.

That hypnotic suggestion is destined to play henceforth an important part in the treatment of disease and the alleviation of human suffering is evident, and enlarged observation will show what it can and what it cannot do.

Its future in this country depends on the attitude the medical profession assumes towards it during the next few years. If the attitude is a wise one, and the utility of hypnotism in treating certain diseases is recognized, and its practice given an honourable position, we shall see

benefit conferred on humanity. Hypnotism affords special scope for quackery, and if its legitimate possessors refuse to use it, we shall probably see a class of undesirable practitioners arise whose interests in it will not coincide with those of their patients or the profession.

In giving evidence in 1913 before a mixed committee of eminent doctors and clergymen, presided over by the Dean of Westminster, instituted to investigate the claims of mental and spiritual healing, I expressed earnestly the opinion that both professions should study normal and abnormal psychology—*i.e.*, human nature. The young practitioner knows all about disease and drugs, but is ignorant of human nature; the quack knows nothing of medicine, but makes an intimate study of human nature, and waxes fat to the detriment of the profession and the public.

I cannot think this necessary instruction will be long delayed. Its need was forcibly brought home to me a short time ago. Dr. X—— came to see me, and asked me to show him some hypnotic practice. He was in practice in New Zealand, and had come home to take his M.D. at Cambridge and to take up post-graduate work at the hospitals. He wished to return to his practice fully informed as to the latest things in medicine and surgery, and expressed great indignation that no reference should have been made by his teachers to psycho-therapy. I think instruction in hypnotic theory and practice should be given in general hospitals and medical schools as a part of the ordinary student's curriculum. Nothing could be more adapted to impress the young practitioner with a sense of his responsibility. In after-life he could use hypnotism himself in a few suitable cases, and would at any rate be able to advise patients what to do. We do not all do the operation for appendicitis, but it is a poor doctor who fails to recognize its needfulness. I have known people die from such ignorance, and I have seen patients condemned to suffer for years when psycho-therapy would have speedily cured them.

CHAPTER XI

TREATMENT BY SUGGESTION DURING THE WAR

By A. Percy Allan, M.D., B.S. Lond.

Whatever may have been the position of the medical profession and the general public towards hypnotic treatment in the past, the recent war has manifested to everybody the benefits and cures that have resulted by its employment. It is on this subject, the treatment of war neuroses, that I have added this chapter at Dr. Lloyd Tuckey's request. We may divide the treatment employed during the period of the war, and subsequently, into the two main divisions of suggestive therapeutics:

(1) Treatment by hypnotic suggestion.

(2) Treatment by ordinary suggestion (gross suggestion, and by persuasion).*

With regard to (1), hypnotic suggestion, a great deal has been done, and hypnotism has been largely employed both by myself and others who have had the care of soldiers, and to whose lot has also fallen the treatment of war neuroses among the civil population owing to bereavements and the terrors caused by aerial bombardments. Important as our treatment by hypnotic suggestion has been, I should like to insist that our results are only the outcome of the work established by practitioners in this branch of medicine for over a quarter of a century, and while we have done nothing new, our

* With regard to psycho-analysis, which has been, and is, employed in treating cases of war neurosis, I would mention that we consider reference to this form of treatment obviously outside the province of a work dealing with *hypnotism* and suggestion.

war-time experience has further convinced us as to the great curative effects of hypnotic suggestion.

I have been for some years past interested in treatment by hypnotic suggestion of two very troublesome conditions—viz., enuresis and stammering. Two cases of these conditions occurring in soldiers are useful as illustrations:

J. D——, aged twenty-two. Joined army August, 1915; first seen by me February 23, 1918. Family history bad. Mother very neurotic. Father violent-tempered. Two sisters, aged eighteen and twenty-four, have both suffered from enuresis. The patient has always wetted the bed, never missing more than one or two nights a week. He has hay fever in summer. At the first treatment he fell into the second stage, and on the second he fell into the third stage. After the first sitting he missed wetting for three nights and wetted the fourth; after the second sitting he wetted three times in a week, and the next week the same. After that the intervals became wider, and he remained dry for a whole week at a time; then the remissions lasted two or three weeks, and finally the habit was completely broken and he remained cured, without any subsequent relapse. I gave him in all nine treatments.

G. A. M——, aged twenty-one. Has always stammered; no history of this defect in family. Served for three years as driver in Royal Artillery during the war, and for two years in France. His stammering had become worse during his service. He was a bad case, with grimacing and body movements. I saw him first in March, 1919, when he easily fell into the second stage. Two days afterwards he came again, and I could not believe he was the same man, as he spoke quite easily, and the stammer was only noticeable after a conversation with him. He afterwards fell into a very light sleep, ' losing himself,' but hearing what I said to him. I then treated him at weekly intervals, he improving, showing hesitation, but no stammering, and was able to use the

telephone. His stammering completely disappeared, and I advised removal of his tonsils and adenoids to improve his vocalization.

Like many others practising this form of therapeutics, I was obliged for two reasons to look for other means of treatment otherwise than by actual hypnotism. First, because, owing to the pressure we were working at during the war, it was impossible to give the time necessary; and, secondly, because by experience we found ordinary suggestion produced excellent results in ailments caused by the stress and strain of war. This brings me to my second division of this subject—treatment by ordinary and gross suggestion with persuasion. For this purpose we extended into a system methods employed by all good physicians during the ages. Dr. A. F. Hurst and his staff at the Seale Hayne Hospital employed these means of treatment with extraordinary success, widened our outlook, and put this form of therapy on a firm scientific basis.

At the outbreak of the war I found myself in charge of a hospital of thirty beds.* Though I had read what we may now consider to be premature views as to the pathology of shell-shock, my training made me rather sceptical, and determined me to attempt to relieve, at all events, the functional element present, following the lines all good physicians had employed in the past. Time, as I have said, would not allow long and elaborate séances. The cases I had to deal with during the war period, upwards of 124, were the usual neurasthenic, psychasthenic ones, presenting symptoms of tremor, deficient circulation, insomnia, bad dreams, anorexia, enuresis, defects of sight, hearing, and speech. I was assisted in succession by two or three able sisters, and the tone of the hospital was excellent. Miss Graham, who as sister assisted me during most of the time, was altogether excellent, and together we

* Wallacefield Hospital for Soldiers and Sailors (auxiliary to the Fourth London General Hospital), Coombe Road, Croydon.

treated our cases by suggestion, persuasion, and encouragement. I saw each case personally, as far as possible daily, and at decent intervals we remarked on the improvement made—an improvement sometimes only present in our minds, though the betterment, by the system we worked on, was really surprising. The companionship of the healthy-minded wounded, who predominated, was, I am sure, beneficial to these cases of neurosis, and we used to pair them off together. For insomnia I gave instruction in muscular relaxation, and a small dose of potassium bromide (seldom more than 5 grains), given with suggestion at bedtime, did wonders for restlessness and nightmares. I had all cases of bad sight and photophobia examined by Mr. Charles Wray, F.R.C.S., and when no lesion was found, explained the condition to the patient, telling him that as he got rested and well fed he would improve and soon get all right. With photophobia cases I allowed dark glasses for a time out of doors, but got them abandoned as soon as possible. Gross suggestion was employed in some cases—means such as syringing the ears, politzerization for deafness, and painting the throat with glycerine acid carbolic for globus hystericus. I was struck with the number of cases of pharyngeal anæsthesia, but Dr. Hurst and Dr. J. L. M. Symns, who systematically observed this phenomenon, are of the opinion that it is no commoner in hysteria than among normal people.* In cases of aphonia I explained to the patient that, owing to his nervous condition, he had got into the habit of drawing his larynx up, and that therefore he could not produce his voice; that if I held his larynx down firmly with my fingers he would be able to speak; so doing, after some deep inspirations, I got him to count slowly after me. Further education did the rest. The following case is interesting, and exhibits relapses:

S. F——, aged twenty. Was through the ' thick of it '

* ' Pharyngeal Anæsthesia,' by A. F. Hurst and J. L. M. Symns, Seale Hayne Neurological Studies, vol. i., No. 1.

in France. He comes of a highly nervous stock on his mother's side. His war record was excellent. He came to me early in 1919 with complete aphonia and pharyngeal anæsthesia; by the means mentioned above he left my consulting-room speaking quite well, and I ordered him a holiday with relatives. His father came to me the same day, and was indignant that I attributed the condition to 'nerves,' pointing out his son's excellent war record. The father was not then in a condition to influence by argument, so I said little. About a week afterwards he called again and apologized. It appeared that while away the aphonia returned, and the patient was taken to see Sir Dundas Grant, who corroborated all I had said. The aphonia occurred once more when he returned home, and was cured by the same means, after which he has remained cured.

In some of these cases I found a quick cure by the application of the electric current—an old method, but worthy of mention. Cases of *war enuresis* I treated successfully by a *placebo* given to 'correct the irritation of the bladder.'

So far we at Wallacefield stumbled along in our treatment with considerable success, and were very pleased when the authorities hinted at one inspection that we might be employed for 'shell-shocks' only. This, however, we were compelled to decline for two reasons: first, because our voluntary staff had no interest in these cases, and might resign to go elsewhere; secondly, because we had imitative neurosis threatening among our staff. I was obliged to make a visit to the Fourth London Hospital to explain this, and to stipulate 'not too many nerve cases.'

Had I had more leisure, I should no doubt have profited by what was being done elsewhere, and Dr. Hurst's observations would have materially assisted me, and no doubt my results would have been more satisfactory. I cannot do better, in concluding this chapter, than to give a short account of the work done by Dr.

Hurst and his colleagues, Drs. Symns, Reynell, and Wilkinson, at Seale Hayne. They employed in treatment all the means I have mentioned, including hypnotic suggestion, and in their publications insist that functional conditions are to be treated only by psycho-therapeutic methods, and that, so treated, they are successfully and rapidly cured. They further insist that the functional element in *organic disease* is to be treated and removed by the same methods. Perhaps the most instructive of these neurological studies is that dealing with 'the hysterical element in organic disease and injury to the central nervous system.'*

The authors point out how it has long been recognized that hysterical symptoms may be grafted on symptoms caused by organic disease. Therefore they habitually treated every case by psycho-therapy in which a hysterical element conceivably was present. In the majority of these cases the gradual improvement in the actual lesion is accompanied by a corresponding functional improvement. Among suggestible individuals, however, such as soldiers mentally and physically exhausted, the patient may not realize that the lost functions are returning. The initial incapacity gives rise to a permanent incapacity by auto-suggestion. A paralysis may be thus perpetuated in a suggestible man by the development of a hysterical element which is produced by suggestion, and which can be removed by psycho-therapy. A condition may thus occur which is primarily organic, but is ultimately hysterical. Everything of organic origin may disappear, or the residual lesion may be sufficient to produce organic physical signs without any loss of function, or both organic physical signs and some loss of function.

The authors of this particular article furnish a number of diagrams to illustrate these statements. It will be sufficient for my purpose if I simplify these, hoping that those who read this chapter may study the more detailed originals.

* Vol. i., No. 3, article by A. F. Hurst and J. L. M. Symns.

The point A (Fig. I.) represents a soldier in perfect health; suddenly a shell explodes, and he receives a blow on his spine. A^1 represents his condition immediately after—the maximum amount of his incapacity. But he is going to get perfectly well; A^1B represents his gradual improvement, and at B he is as well as he was at A (before the injury). But, unfortunately, when he received the organic injury he received a ' functional ' injury, so that by the time his condition reaches B (recovery) he is as bad as ever, A^1B^2. The triangle A^1B^2B then represents his functional disease, and if we remove this by psycho-therapy our patient is cured.

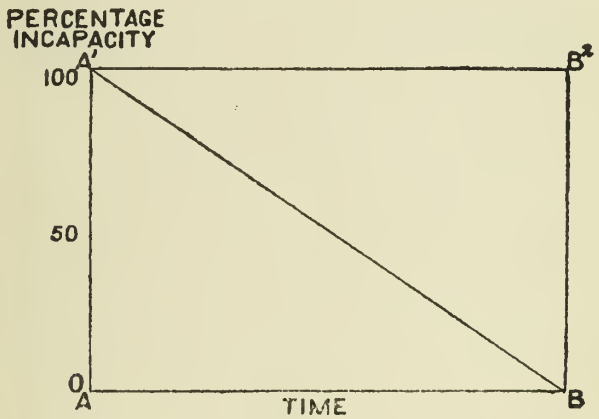

FIG. I.

In organic disease we can make use of a similar diagram. In Fig. II., A represents a man in perfect health, but who develops, say, locomotor ataxy. He is gradually going to get worse, bedridden, and die; AB^1 represents the progress of the disease to B^1 (death). The point C on line AB^1 represents the occasion when he consults a doctor and when the diagnosis is made; a functional condition is then superadded to the original disease, indicated by the rapid rise from C to D, and the patient will progress along the line DB^1 (to death). If now he be treated by psycho-therapy we can remove the func-

tional disease, and we get the drop DC^1. The only actual progress the disease has made is indicated by CC^1, the interval between the shock of the diagnosis and the cure of this by psycho-therapy.

As a practical example of this treatment in soldiers let us take the Seale Hayne treatment of bent-back. The soldier, completely recovered from the organic lesion of his back, still goes about bent forward walking on two sticks. He is able, however, to lie perfectly flat on his back in bed. His condition is fully explained to him, and he is placed on his back in a tray with his feet on a vertical board at the bottom. The tray is then gradu-

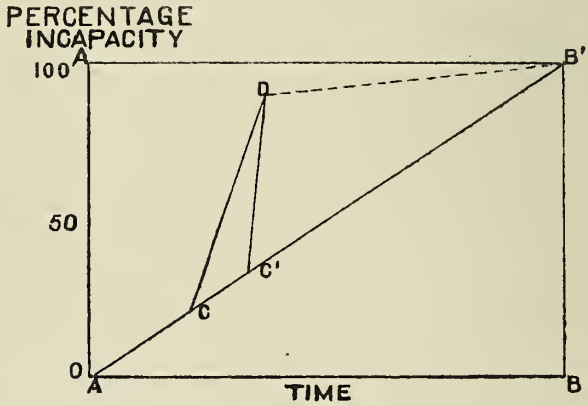

FIG. II.

ally raised from the top, so that he assumes the upright position and stands on his feet.

Now he is told that he is standing upright with his back perfectly straight against what was the bottom of the tray. The order is then given to walk off, and the cure is complete. It is to be regretted that space will not allow me to epitomize further this valuable work, but I trust that these short notes will induce others to consult the original articles and to peruse Dr. Hurst's Croonian Lectures,* in which much of the work at Seale Hayne

* 'Psychology of the Special Senses and their Functional Disorders.' London, 1920.

is given, together with subsequent original observations in functional conditions.

In conclusion, I would add that I am strongly of the opinion that, while we can with advantage employ plain suggestion in the treatment of many disorders, this form of treatment will in no wise displace *hypnotic suggestion*, in proof of which I may say, with experience of both methods, that I am still employing the latter largely in my practice. With the war neuroses we were in part dealing with normal individuals broken by the war. In our private practice the 'nerve cases' are abnormal individuals. With the class of patients now sent to me for treatment by hypnosis the other method has been tried by experienced practitioners, and in some cases by physicians of eminence. As I have hinted in this chapter, the good and successful practitioner does not, to use the words of the late Sir James Goodhart, 'leave suggestion to the hypnotist,' and he has never done so. Therefore I feel sure the practice of hypnotism, introduced by Dr. Lloyd Tuckey into this country over thirty years ago, will continue to bear fruit, and accounts for the demand of this new edition of what we all consider to be a classical work on this subject.

CHAPTER XII

SOME RECENT EXPERIENCES DURING THE GREAT WAR

SINCE my last edition was in the hands of the publishers the world has been in the throes of the greatest war in history.

Medicine has received an impetus which otherwise it would have taken at least fifty years to obtain; the results achieved by surgeons and physicians under the most adverse circumstances have been little short of marvellous, when one remembers the conditions with which they had to contend.

The tide has turned in England as regards 'suggestive treatment,' and I am glad to note that hypnotic suggestion is beginning to take its proper place in our medical world. When drugs were scarce at the front, and chloroform almost unobtainable, 'suggestion' helped to relieve pain and the most acute forms of mental suffering.

Men who were in mortal terror of returning to the battlefield, through its influence were again enabled to face '*the inferno*' with intrepidity and courage, their nerves once more steadied for an ordeal from which the bravest might quail.

Although debarred through ill-health from treating soldiers during the latter part of the war, scarcely a day passed in which I did not receive grateful acknowledgment of the wonderful effect produced on the men by this treatment. I hear its practice saved hundreds from becoming permanently deranged. A surgeon writes from

the front: 'If it had not been for hypnotism and suggestion, many hospitals would have been turned into lunatic asylums.'

Owing to want of space I can only give a few extracts from the numerous letters which have reached me.

Case 1.—*Shell-Shock.*

A. C——, aged forty-five, army chaplain, was doing arduous work at the front; he gradually developed symptoms of shell-shock and neurasthenia, losing the faculty of sleep and becoming unable to concentrate his thoughts. Slight noises caused great excitement, followed by mental depression. Officiating at military funerals gave him such acute suffering that he was on the point of resigning his commission. Before taking this step, he determined to try the effect of hypnotic treatment. Fortunately he proved an exceptionally good subject, or his cure would have been hopeless. Sleep was recovered, and the nervous tension relieved. After twelve treatments extending over three weeks he reported himself cured and able to return to France, where he remained for the duration of the war without ill-effects. This is one of several similar cases I have treated, and I learn from many medical correspondents that they have found hypnotic treatment almost specific in dealing with this form of neurasthenia.

Case 2.

E. H. M——, army surgeon, writes from the front: 'Thanks so much for your letter. I would like to tell you that you first put me in the way of using "suggestive treatment." I don't mean that I often use the "full technique," as one may say, but I just set out, with some measure of success, to influence those men who come under my care. Really that is the most important part of our work, and I cannot be too grateful to you for the results I have obtained.'

Case 3.

H. J—— writes, 1917: 'While out in France as a regimental medical officer I had the pleasure of reading your book on hypnotism. I carried out the ideas it taught, and was fortunate enough to be successful in a number of cases of "shell-shock" and nervousness generally, although I worked under the disadvantage of treating my cases in a regimental aid post situated in close proximity to a British battery. Indeed, we not unfrequently were actually shelled by the enemy whilst I was working.'

Case 4.

M. G—— writes, 1918: 'I feel I owe you a great debt of gratitude for all you have taught me, both during treatments and from your books. Thanks to that, I am doing most interesting work hypnotizing at one of the hospitals here. I started two years ago at the Royal Marine Hospital, Chatham, the fleet surgeon and others looking on. I have also been working at the Canadian Hospital; my greatest successes are with shell-shock cases. The doctors not only allow, but ask me to treat the patients. One of the sisters is most anxious to learn all the little I know. I have told her she must read your books, and Braid and Liébeault.

'Your patient, my midshipman son, was none the worse after the battle of Jutland.'

Case 5.

This extract is from a medical officer's letter, Captain F. W——, with the B.E.F., France, 1917:

'Your very kind letter reached me here this morning, and I am sorry I cannot exchange my outdoor aid post on the upper slopes of a just-captured ridge for your study at Eastbourne. There are a large number of things I would gladly ask you referring to the actual

practice of the treatment, and whenever I get leave again I shall endeavour to put myself under you for practical instruction. I owe a great deal to your book, and hope to owe still more. I have only to-day been treating for the first time a new-comer to the regiment for whom recent artillery engagements have been a bit too much. I was gratified to get him into the somnambulic stage while the artillery were actually engaged on an exceedingly lively and disturbing duet. His tremor, which was pronounced, passed away, and he went back to his duty vastly comforted.

'A number of this class of case convince me of the value of the treatment to which you have introduced so many of us.

'Apropos of the interest aroused in medical circles by the war use of hypnotism and suggestion, it would give me great pleasure to hear of the establishment of a *clinique* in London for the benefit of medical men wishing for instruction and advice on this subject.

'The time has come to place psychotherapy on a proper footing, for we may be sure that if not taught rationally and by the right people, it will be taken up by quacks and charlatans.'

APPENDIX

Dr. Yung's Experiment with 'Magnetized Cards.'—Hilger's Experiment to show Subconscious Direction.—James Braid, of Manchester.—Duration of Hypnotic Sleep.—Luys' Rotating Mirror and Ochorowicz's Hypnoscope.—Theory of Professor Delbœuf.—Theory of F. W. H. Myers.—Some Phenomena of Hypnotic Somnambulism.—Liébeault's Classification of Hypnotic Sleep.—Method of Public Performers.—Resolutions adopted at the Paris Congress.—International Statistics of Hypnotism.—Experiments in Auto-Suggestion.—Hypnotization of Animals.—Treatment by Transfer.—Christian Science Healing.—Hypnotism and Crime.—The Hypnotic Will Case.—False Evidence and Suggestion in Legal Cases.—Belgian Legislation regarding Hypnotism.

Note 1.—For Page 27.

I am informed on the best authority that in the initiatory rites of several secret societies the candidate is submitted to a somewhat similar ordeal. He is told that he must submit to be bled. His eyes are blindfolded, his arm is pricked, and a stream of warm water is allowed to trickle down it.

The surroundings at the same time being mysterious and awe-inspiring, a very great effect is produced on nervous and sensitive subjects. Syncope and nervous exhaustion not uncommonly follow the ceremony, and the new member may be made ill for days.

The rite is, no doubt, an example of the survival of the form after the unpleasant reality has, in deference to civilization, been allowed to fall into disuse.

An amusing experiment is described by Dr. Yung, *privat docent* of Geneva, which forcibly displays the power of suggestion without hypnotism. He calls it 'the ex-

periment with magnetized cards,' and he carries it out as follows: With a grave face and serious manner he proceeds to give a short account of ' animal magnetism,' and to explain how the ' subtle fluid ' can be made to affect even inert substances. Having thus aroused ' expectant attention,' he carefully arranges a few cards on the table and makes ' magnetic ' passes over them. This process, he assures his audience, charges the cards with his magnetism, and makes them different to any other cards, so that if a person touches one of them he will change its polarity, and it will thus be distinguishable to his touch from the others. He then leaves the room, and a bystander touches one of the cards. Dr. Yung, on his return, makes a few passes over them, and finally picks out the card which has been touched, saying that he feels contact with it sends a nervous thrill up his arm like an electric shock.

But he adds there is nothing wonderful in this, as anyone will experience the same thing. The challenge is accepted, and probably the most sceptical person in the room goes through the same pantomime of magnetizing the cards with a look of scornful contempt on his face. No card is touched, and he is told on his return not to make a guess, but to really try if he can detect a difference between one card and another. In nearly every instance Dr. Yung found a difference was said to be felt, and whatever card was indicated was declared to be the right one. The experimenter is shut out of the room a second and a third time, and it is nearly always found that by the third time the subject will declare he undoubtedly feels a very strong nervous shock of the kind described by Dr. Yung. Of course, Dr. Yung had a confederate, who, by an agreed-upon signal, informed him of the card which had been touched. He has tried this experiment on about 800 persons, many of whom were medical men and scientific students, and in nine cases out of ten he has elicited by pure suggestion the sensations he described.

I have repeated the experiment in about a score of cases

and in nearly every instance have obtained a like result. One subject, a particularly wide-awake American, assured me at the third trial that the shock was quite as strong as that received from a powerful static battery which he had just been testing.

Hilger describes the following experiment as showing the involuntary action of attention on the voluntary muscles:

A watch is laid face upwards on the table, and a small ring or ball is held over it, suspended by a fine thread from the fingers held above it. Determine that the object shall swing in a line between the figures 12 and 6, and keep the gaze and attention fixed on these figures. In a short time the ring will actually move in the direction thought of. This form of experiment can be repeated in many different ways, and explains most of the phenomena of thought-reading, table-turning, etc. Passes made over a person's hand, placed limply on the table, will often cause it to rise and follow the operator's movements, and I sometimes use this action to test a patient's suggestibility. No suggestion of the expected result is made, but the action seems to afford an indication, and the patient often describes all kinds of subjective sensations, such as pricking, burning, drawing.

Note 2.—Braid of Manchester.

James Braid used to throw his patients into a kind of sleep or trance by making them fix their eyes and attention on a bright object—generally his lancet-case—held a few inches above the eyes. He found this caused fatigue of sight and abstraction of mind, which in nearly all cases induced the condition he termed *hypnotism*.

He practised his system successfully for many years at Manchester, and wrote several books in which he fully explained it.

But it seems to have died with him, and it is only now that *suggestion* with hypnotism has come so prominently before the profession that his works begin to be largely

read. The most important one, 'Neurypnology' (London, 1852), has been translated into French by M. Jules Simon —an almost unique honour, I imagine, for a foreign medical author nearly thirty years after his death.*

Braid found hypnotism increased the heart's action to such an extent that he warned medical men against using it when heart disease was suspected. He found it impossible to get children to keep their eyes fixed on his lancet-case for the necessary four or five minutes, and therefore regarded them as insusceptible. We have seen, on the other hand, that suggestion finds its best subjects in children between the ages of three and fourteen, and in heart disease it is one of the most successful means of calming and reducing irregular heart action. Braid went near to discovering the truth which Liébeault, a few years afterwards, thought out, and introduced to the world.

Note 3.—Duration of Hypnotic Sleep.

In order to arrive at the solution of this question, Professor Bernheim allowed many of his patients to 'have their sleep out.' He found its average duration was three or four hours, but, as with natural sleep, it varied with individuals and circumstances.

On several occasions it lasted fifteen, and once eighteen, hours. In all cases the patients awoke fresh and comfortable. Dr. Wetterstrand and others, as has been explained, often keep their patients in a state of hypnotic somnambulism for weeks at a time, with remarkable curative results.

Note 4.—Luys' Rotating Mirror, and Ochorowicz's Hypnoscope.

The mirror designed by Dr. Luys, of La Charité, is used in dispensaries and hospitals when it is desired to

* Braid died in 1860, the year in which Dr. Liébeault opened his dispensary at Nancy. So, though unrepresented in England, he found a follower abroad who was possessed of a 'double portion of his spirit.'

hypnotize a large number of persons in a short space of time. It consists of a rapidly-revolving mirror mounted on a stand, and it is found that gazing at this quickly dazzles the sight and produces hypnosis in susceptible subjects. By its means a roomful of people may sometimes be hypnotized at once, and the suggestions can be applied at leisure. There is a large sale of these instruments in Paris, but in private practice I think they would not be found very effectual. Liébeault and others frequently operated on thirty or forty patients in a forenoon by the ordinary method without fatigue, so I fail to see the object of this plan of hypnotizing people wholesale.

Considerable experience with Luys' mirror has not altered my opinion as to its utility. In one instance, a hysterical young woman, whom I cured of very obstinate hiccough (it had been almost incessant for seven years) by suggestion, was hypnotized by gazing for twenty minutes at the mirror after other methods had failed; but her case is almost an isolated one in my experience. Though Dr. Luys stated that everyone goes to sleep after looking at the mirror for half an hour at the longest, I have seen several patients, who wished to be influenced, gaze at it steadily for nearly an hour without any result except a headache. I have seen it produce most violent palpitation, and altogether should advise caution in the use of the instrument.

Dr. Ochorowicz, late Professor of Physiology at Lemburg, has devised an instrument for testing hypnotic susceptibility, which he calls the hypnoscope. It consists of a steel magnet bent in the form of a ring, which is placed on the patient's finger. He finds susceptible persons experience a sensation of numbness and stiffness in the part after wearing the instrument for a short time, and the finger is often rendered rigid and immovable. Ochorowicz himself seems to think this effect is the result of suggestion, and no doubt a patient who is so easily influenced by the imagination would be a good subject for

the treatment. But I feel sure that many persons who are sufficiently susceptible to hypnotism to benefit from suggestion would be quite insensitive to such action. Readers of Braid's 'Neurypnology' will remember how he paid a visit to a lady who announced herself as so affected by a magnet that she knew at once when there was one anywhere near her. Braid sat close to her for an hour with a most powerful magnet in his pocket within a few inches of her, but she experienced no discomfort, *because she did not know it was there.* I have frequently produced many curious local subjective symptoms in impressionable persons by passing a magnet over a limb, but always of the nature I had previously suggested.

Note 5.—Theory of Professor Delbœuf.

The late Dr. Delbœuf, of Liége, whose experiment on the cauterized arm has been referred to, puts forward a theory to account for this action of suggestion on the functions of organic life. He supposes that under ordinary circumstances our attention is concentrated upon external things, from which come our more vivid impressions—the life of relation. The vegetative functions are so established that they go on automatically and unconsciously, and it is only under exceptional circumstances that we become acquainted with the working of organic life; *e.g.*, lying awake at night, we become conscious of the movements of the heart; and in illness we are frequently made unpleasantly cognizant of functions at other times unfelt. But though in the progress of evolution it has been found expedient that the functions of organic life should be carried on automatically by the lower departments of the cerebro-spinal system, in order that all our attention may be devoted to accommodating ourselves to the environment, the highest centres have not yet entirely lost control over those below them, and may under certain circumstances resume, on occasion, the power which they had ceased to exercise. It is well, under ordinary circumstances, that organic life should be carried on automatically; but it is

conceivable that conditions may arise in which the interference of the suzerain may be necessary. It is in these cases, according to Delbœuf, that hypnotism plays such an important part. The hypnotized person is more or less cut off from the life of relation, and the attention, being set free from consideration of the environment, can be directed inwards, and made to concentrate itself for a time on the organic functions; the mind is thus enabled to resume its knowledge and the will its control.

On this theory it is possible to understand the different degrees of control over those functions exercised by different individuals. On the one hand we see or hear of exceptional cases like that of Colonel Townshend, in which a person is able, apparently, to exercise some control over his organic functions in his ordinary waking state; and others in which such a result may be brought about by special physical preparation—*e.g.*, the Indian fakirs. The theory explains the facility with which we produce curative effects in certain patients who are only slightly influenced by hypnotism, whilst in others our suggestions only affect functions and relieve symptoms when the hypnotic sleep is extremely profound.

Note 6.—Theory of F. W. H. Myers.

The late Mr. F. W. H. Myers for many years made a careful study of hypnotism from a psychical point of view, and his researches on the subconscious self, or subliminal consciousness, are embodied in the Proceedings of the Society for Psychical Research, and in his great posthumous work, 'Human Personality: its Survival after Death.'

He was invited to address the members of the British Medical Association at Edinburgh in 1898, in the section of Psychological Medicine, and he there briefly expounded his theory, which is this: Ordinary consciousness makes up but a small part of a man's personality. 'Beneath the threshold of working consciousness there lies, not merely an unconscious complex of organic processes, but an

intelligent vital control.' He supposes that this subliminal consciousness is evoked by the hypnotist, who is thus enabled, as it were, to tap a deeper stratum of being, which is more independent of passing impressions and environment than the ordinary strata of consciousness. In hysteria with anæsthesia, restricted field of vision, and blunted muscular sense, we see a curtailment or submergence of the normal self; whereas in the manifestations of genius we have its enlargement or emergence.

It is this higher level which is spoken of as inspiration, and which is developed in all great poets, artists, and teachers who are illuminated by the flash of genius, or an emergence of faculty from the subconscious strata.

Myers was a poet as well as a psychologist, and might, I suppose, be called a pantheist. He believed in a 'world-soul,' with which our higher nature is in communion, more or less. This, however, is not the place to expound the depths of his philosophy, or to praise the beauty of the language in which his ideas are expressed.

Note 7.—Some Phenomena of Hypnotic Somnambulism.

Many extraordinary and, at the present time, inexplicable phenomena can be produced in subjects who attain the last degree of hypnotic somnambulism.

Such persons are but rarely met with, and are, I believe, always of hysterical temperament, which is frequently combined with a tendency to phthisis, scrofula, or other chronic disease.

These phenomena, as has been already said, are of purely psychological interest, and should be kept entirely distinct from therapeutic suggestion.

Among Liébeault's patients at Nancy was a young woman named Camille, a favourite subject for experiment, as she readily falls into the most profound state of hypnotic somnambulism.

Like many hysterical persons, she took a pride in her

infirmity, and therefore, without being over-sceptical, one may wish to verify the experiments tried on her. One of the most curious of these is the production of *negative hallucinations* by suggestion. Camille, and one or two other persons of the same nervous temperament, would be told that on waking they would not see So-and-so, though he might speak to her, touch her, and even prick or pinch her, and the suggestion was realized. Or they would be told that the door was no longer existing, in which case, though apparently quite awake, they would seek in vain to cross the threshold until the spell was removed.

On my return to London I was fortunate enough to meet a lady who takes a great interest in the subject, and is at the same time susceptible of being thrown into the most advanced stages of hypnotic somnambulism. Her husband is a man of science, and also much interested in hypnotism. They were both quite ignorant of the phenomena I wished to produce, and the conditions therefore were perfectly satisfactory.

Mrs. H—— is about thirty years of age, small, slight, and a blonde. She is highly nervous, and occasionally hysterical, but she enjoys good health, is intelligent, and active in her household duties. On the first occasion I tried to develop a negative hallucination her husband was confined to the room with a bad cold, and was sitting by the fire in an arm-chair a few feet from her. I hypnotized her, and told her that on waking she would not see him, would not hear him if he spoke to her, and would not feel him if he touched her. All this was literally realized. She was apparently wide awake, and yet when I asked her where her husband was she said she didn't know, but thought he had gone upstairs, and would be down very soon. He spoke to her, calling her by name, and asked her to get his medicine, to stir the fire, what there was for supper, and a number of other questions. She gave not a sign of having heard; in fact, she evidently did not hear him, though she conversed with me intercurrently

quite rationally. Mr. H—— then approached her, touched her hand, sat down beside her, and talked; but evidently for her he had ceased to exist, as she betrayed not the faintest consciousness of his presence. I then asked Mr. H—— to speak impersonally, and he said, 'Mrs. H—— will now go to the table, take up the doctor's gloves, and try them on.' She did not appear to hear, but in a few moments she got up, went to the table, and tried on my gloves—a thing she would never have thought of doing of her own initiative. I asked her why she did this, and she replied, 'I don't know; I thought I should like to.' She was not aware that the impulse proceeded from another. When I blew on her eyes, and said, 'Mrs. H——, there is your husband close beside you, and you can see him now,' she looked fixedly at his chair for a moment, and then said, 'Yes, I see him now; but where was he a minute ago?' adding, 'At first he looked small and indistinct, but now it is all right.'* We know we may look at a thing and yet not see it when in a 'brown-study' or preoccupied with something. A familiar example of this is afforded by observing how absent-minded people pass their friends in the street without recognition, though their eyes may dwell on them for some time. Afterwards they will deny having seen them, and truly they have not. 'Eyes have they, but they see not.' A physical impression has been made on the retina, but it has not undergone that cortical co-ordination or registration in consciousness without which there can be no perception.

I had only learnt that morning, from reading an article

* Binet and Féré, *op. cit.*, p. 311, relate a convincing experiment showing a reality of this psychical blindness. A subject had on each side of the mammary region a hysterogenic zone, pressure on which immediately produced a hysterical attack. One of the physicians rendered himself invisible by suggestion, and at the same time destroyed the sensation of contact on his approach. A strong pressure on the zones then failed to produce any attack, nor did she make any effort to repel the experimenter, but only complained of a vague sense of oppression. On the other hand, she recoiled in terror when another person put his hand near these zones.

by Professor Liégeois,* the curious fact that in hypnotic somnambulism the subject will carry out a suggestion made by a person whom she is prevented, by some inhibitory nerve action, from apparently either seeing or hearing. The same lady kindly allowed me to try other simple experiments on her. She was ignorant of the nature of them, and only stipulated that they should not make her appear ridiculous or cause much pain. When in the hypnotic sleep I gently touched and kept my forefinger on a small surface of the wrist, saying while I did so, 'Poor Mrs. H—— has a nasty burn on her wrist, probably from some boiling water; the place is very red, and rather painful.' In a few minutes I awakened her, and she immediately began rubbing her wrist, as if in pain there. On my asking her what was the matter, she replied, 'I think I must have spilt some boiling water on my wrist; it feels as if I had burnt it.' On looking at the spot, there was a very perceptible patch of redness about the size of a sixpence, and every moment this became more defined and angry-looking. As the pain was increasing, it would have been a breach of our agreement to protract the experiment, so I hypnotized her once more, and told her that there was no burn, and that the redness and pain would be quite gone when she awoke. In point of fact, a very short time was sufficient to disperse the morbid appearance, and on reawakening her there was no complaint of discomfort. The same lady after the first operation complained of chilliness and stiffness, but I had only to suggest on future occasions that she was not to feel these unpleasant symptoms to ensure her not being troubled with them.

These experiments belong in no way to therapeutic suggestion, but are of interest, as they show how exactly the phenomena produced at Nancy may be reproduced by experiment in England.

* 'Un Nouvel État Psychologique,' *Revue de l'Hypnotisme*, August, 1888.

Note 8.—Liébeault's Classification of Hypnotic Sleep.

First Degree.—The patient feels a heaviness of the eyelids and a general drowsiness.

Second Degree.—This is characterized by suggestive catalepsy. When the operator places the arm in a certain position, and says it is to remain there, it is impossible for the patient to put it down. It remains rigid and fixed for a much longer time than would be possible in a natural state. In these two degrees consciousness remains almost complete, and often the patient denies having been in the hypnotic state, because he has heard and remembers every word which has been spoken to him. A very large proportion of people never pass beyond this stage.

Third Degree.—In this the subject is also conscious of everything going on around him to a certain extent, and hears every word addressed to him; but he is oppressed by great sleepiness. An action communicated to a limb is automatically continued. If the arm is rotated to begin with, it goes on turning until the operator directs its stoppage. The term 'hypotaxis' is applied to these second and third degrees.

Fourth Degree.—In the fourth degree of hypnotic sleep the patient ceases to be in relation with the outer world. He hears only what is said to him by the operator.

The *Fifth* and *Sixth Degrees*, according to Liébeault, constitute somnambulism. In the former, recollection of what occurred during sleep is indistinct and recalled with difficulty; in the latter, the patient is unable to recall *spontaneously* anything which has occurred while asleep. All the phenomena of post-hypnotic suggestion can be induced in this condition, and it presents features of extraordinary interest to the psychologist.

Note 9.—Method of Public Performers.

Though, in deference to public sentiment, the travelling professors' style themselves hypnotists, it is easy to see

that they do so somewhat under protest, and that they much prefer the old name of ' mesmerism,' or, better still, ' animal magnetism.'

Their method is the same all the world over. A certain number of previously-hypnotized subjects are scattered among the audience, and when the lecturer asks for persons to experiment on, these make a rush for the platform, and form a nucleus on which to work. Probably a few *bona-fide* strangers will lend themselves for experiment, and one way and another the platform will be well filled with candidates. The lecturer gives to each person a bright disc, which he is to look at steadily. In a few minutes he goes round, closes the eyes, and tells the subject that he is unable to open them. If he opens them, he is sent back to his seat among the audience; if not, he is reserved for further use, and is given a seat on the platform. A favourite plan with the experimenter is now to open the subject's mouth to its widest extent, turn him round so as to face the audience, and tell him he is unable to shut it. A friend of mine, a doctor in good practice, was so treated in a foreign watering-place, and his feelings when he was thus made a laughing-stock of a large assemblage of people were not enviable. After these experiments in inhibiting voluntary motor action, the lecturer will go on to produce hallucinations of the senses, and will amuse his audience by showing what antics a human being can be made to perform when he has been deprived of the use of the higher brain functions. He can be made to think himself a general at the head of his army in battle, a school-boy being flogged, or an animal at the Zoological Gardens. Whatever he is told to believe is at once acted upon, and as the lecturer's object is to cause amusement, he finds it advantageous to make the actions outrageous, and to alternate the imaginary changes of condition as rapidly as possible. It is no wonder, therefore, that the unfortunate subjects complain the next day of malaise and mental confusion, and it is fortunate if no graver results follow.

The performance of such a person has about as much relation to psycho-therapeutics as the antics of a merry-andrew at a fair have to the practice of a Court physician. That such things should have been tolerated will probably be a subject of astonishment to our descendants.

A friend of mine a few years ago paid heavily for taking one of these men at his own valuation. He was much struck by the phenomena shown at a public performance, and had a conversation with the 'professor' afterwards, which further impressed him. The next day at his club, some of his friends said the whole thing was a fraud, and laughed at Mr. X—— for believing the performance genuine. My friend waxed warm in argument, and offered to back his opinion by betting £100 that the 'professor' would hypnotize two persons out of any ten selected by the unbelievers.

The bet was taken up by two members of the club, and Mr. X—— stood to win or lose £200.

A supper was arranged, to which the 'professor' was invited, and ten young men selected from a South London football team were brought in after supper as subjects. Not one of them proved hypnotizable, and my friend lost his money.

The conditions were very unfair, as the young men had been told to resist; and to attempt to hypnotize a number of unwilling strangers after supper among a crowd of sceptical lookers-on was a task which no wise man would undertake. My experience would lead me to reckon that, under suitable conditions, eight out of the ten would have been more or less influenced; and probably two or three, after a trial or two, would have proved somnambulic.

Note 10.—Resolutions adopted at the Paris Congress.

The following resolutions were agreed to at the first International Congress of Physicians and Jurists on Hypnotism held in Paris, 1889:

'This Congress recognizes the danger of public exhibi-

tions of magnetism and hypnotism, and deeming that the therapeutic application of hypnotism has become a branch of the science of medicine, that its official teaching is the province of psychiatry, votes the following resolutions:

'1. Public exhibitions of hypnotism and magnetism should be forbidden by the administrative authorities in the interest of public hygiene and public morals.

'2. The employment of hypnotism as a curative agent should be subject to the laws and restrictions which regulate medical practice generally.

'3. It is desirable that the study of hypnotism and of its therapeutic application be introduced into the curriculum of medical sciences.'

The following schedule (pp. 376, 377) has been sent to all physicians who have sent in their names as practising hypnotism. The immense practical value of the statistics to be thus collected will be recognized at a glance.

International Statistics of Hypnotic Impressionability and of Suggestive Psycho-Therapeutics.

The following schedule is framed with the object of elucidating the results of hypnotic treatment by comparative statistics:

'*a*. The proportion of persons who are susceptible to hypnotic influence.

'*b*. The degree of impressionability and its relation to the age, sex, constitution, and temperament of the subject, and the method of hypnotizing adopted.

'*c*. The value of hypnotic suggestion as a therapeutic agent tested by the amount of success and number of failures, by the duration and completeness of the cures, ameliorations,' etc.

This inquiry is extremely important, because authorities are not agreed on the subject, and we therefore beg our colleagues who use hypnotism either as a means of cure or for scientific investigation to fill in the enclosed papers as completely and carefully as possible.

Please give the degree of hypnotism attained, and for the purpose of classification observe the following definitions and characteristics:

I. *Light Sleep.*—Feeling of fatigue. The patient's will-power is either unaffected or it is only slightly modified. It is often difficult or impossible to open the eyes. The subject on awaking remembers everything that has happened, and does not experience the sensation of having slept.

II. *Profound Sleep.*—The patient's will is either partially or completely in abeyance. The eyes are generally closed, but sometimes remain open. Memory on awaking is either lost or incomplete, and he feels more or less the sensation of having slept.

III. *Somnambulism.*—Complete amnesia on awaking, and possibility of realizing hallucinations and other hypnotic and post-hypnotic suggestions.

The sign O signifies the waking state.

Please indicate the method employed by the following signs:

a. Method of Braid and Charcot. Physical means. Vivid sensory impressions (light, sound, etc.). Fixation of the eyes with a brilliant object. Pressure on or friction of certain regions of the body (hypnogenic zones). Monotonous sensory impressions, etc.

β. Method of Liébeault and Bernheim. Suggestion: the method adopted by the school of Nancy.

γ. Combined method—*a* employed systematically in conjunction with β.

Note II.—Experiments in Auto-Suggestion.

Dr. Coste de Lagrave, surgeon-major in the French army, contributed an interesting paper to the International Congress of 1890 on auto-suggestion, and related several experiments he has made on himself during the last few years.

By practice he acquired the power of being able to sleep at will, and of awaking at a definite time. To effect this

Somme totale des personnes.	Hommes (= *h*).	Femmes (= *f*).	Age (approximatif): *a* = 1-10. *b* = 10-20. *c* = 20-30. *d* = 30-40. *e* = 40-50. *f* = 50-60. *g* = 60-70. *h* = 70-100.	Dégré d'influence hypnotique. O. Refractaires. I. Sommeil léger. II. Sommeil profond III. Somnambulisme.	Méthodes employées, $\alpha\ \beta\ \gamma$ o.	Effet nul.	Amélioration légère ou passagère.	Amélioration très décidée.	Guérisons.	Récidives.	Durée des succès.	Ont abandonne le médecin devant traitement fini.	Résultat inconnu.	Nombre des séances hypnotiques.	Remarques.	Nom, titre, fonction du correspondant: Domicile adresse du correspondant:
																I. Personnes saines.
																II. Personnes malades.
																A. Maladies du système nerveux. (Affections organiques.) Affections traitées.
																B. Maladies mentales.
																C. Grandes névroses: (*a*) epilepsie, névrasthénie, tétanie, chorée, etc. (*b*) affections hystérique.
																D. Troubles névropathiques diverses: (*a*) anesthésie, hyperesthésie, crampes, convulsions diverses. Névralgies. Céphalalgie habituelle. Migraine, etc. (*b*) Paralysies fonctionnelles, parésies. (*c*) Autres troubles nerveux, incontinence d'urine

Onanisme. Hypochondrie. Agoraphobie. Impuissance (faiblesse) psychique. Habitudes perverses.
E. Troubles fonctionnelles des appareils ou systèmes en consequence des (*a*) Maladies d'organisation (constitution): arthrite, anémie, maladie tuberculeuse, consécutifs à syphilis. (*b*) Affections rheumatismales: articulaires, musculaires. (*c*) Troubles gastro-intestinaux: vomissements, catarrhes, nerveux (crampes, manque d'appétit, etc.). (*f*) Consécutifs au maladies d'infection. (*g*) Liés à des maladies externes.
F. Anesthésie chirurgicale.
G. Diminution du fièvre.
H. Troubles de la menstruation. Chlorose.
J. Autres affections non citées.
K. Remarques.
Expériences de Stigmatisation, etc.

he only had to lie down and fix his attention on sleep, and on the idea that he would awake after a certain number of minutes. In a short time he obtained such self-control that he could get five or six distinct sleeps, and as many distinct awakenings, in the course of an hour. He also succeeded in producing dreams of the character he wished, and in evoking sensory delusions and hallucinations to such an extent that he became alarmed lest the condition thus induced should become permanent. He was able to apply auto-suggestion in a curative direction, and thus to relieve himself of colic, gastrodynia, and the like. He did this by closing his eyes and concentrating his thoughts on the organ he wished to affect. In from a quarter to half an hour he generally succeeded in getting rid of the pain. On one occasion, when riding with troops, he suffered greatly from cold feet, and he tried the effect of auto-suggestion. He closed his eyes, and induced a state of drowsiness, in which he directed his thoughts to his feet, which he wished to become warm. In less than half an hour he was conscious of a feeling of warmth in them, and as long as he kept his attention fixed there they continued so; but very soon they became cold again when he allowed his thoughts to dwell on other things, showing, as he thinks, that the sensation of warmth depended on mental influence and mind concentration. In subsequent experiments he produced the desired result in a shorter time, and he found that the sensation of warmth was not merely subjective, for on removing his boots he felt the previously cold feet warm to the touch, thus getting the same effect as is nearly always demonstrable in ordinary hypnotic practice.

He relates a curious experience of auto-suggestion in nervous prostration. He had been invalided home from Tonkin for dysentery, and for a year had been so prostrated by weakness that he was unable to walk a mile in the course of a day. One night he suggested to himself increased muscular and nervous force, and ability to walk without fatigue. The next day he walked over six

miles without difficulty; but, unfortunately, he does not mention in his paper whether this effort was followed by reaction, or whether the improvement was permanent.

Dr. Coste de Lagrave continues to practise auto-suggestion, and has published an interesting series of observations on himself in the *Revue de l'Hypnotisme* (March, 1900; May, 1902). He fully describes his method, and seems to think anyone can practise it. The late C. G. Leland, the American author and humorist, working on independent lines, developed a similar system, which he explains in his book, 'Have You a Strong Will?' He also claims to have strengthened his memory, improved his temper, and increased his capacity for work by repeating formulas to himself before going to sleep at night. Hudson in 'Law of Psychic Phenomena' and Wood in 'Ideal Suggestion' carry out the same ideas.

De Lagrave's experiments open up an interesting field of research, and if his experience is corroborated by that of other scientific observers, it will throw light on a number of mental phenomena connected with directed self-consciousness, which are at present surrounded with a degree of mysticism. The yogis and fakirs of India assert that they can obtain remarkable control over their bodily organs and functions by contemplation, introspection, and other mental exercises; and there is little doubt that many of their achievements are the result of auto-hypnotism and auto-suggestion.

Note 12.—Hypnotization of Animals.

Dr. Gerald Yeo, late Professor of Physiology at King's College, read a very interesting paper before the College Society in 1883 ('The Nervous Mechanism of Hypnotism'), in which he propounded some interesting theories on the subject of hypnotic phenomena, and illustrated them by experiments on animals. He showed how animals of such diverse organization as crayfish, frogs, fowls, and guinea-pigs could be easily hypnotized by monotonous continuous stimulation, and made to remain motion-

less and unresponsive to ordinary stimulation. He induced this state by firmly fixing them in one position for a few minutes, and then gently removing the restraining influence, when it was found the animals continued in that position, however abnormal, for several minutes. Kircher's experiment with the domestic fowl is the most familiar example of hypnotic effect in animals. If a chalk line is drawn and the bird held for a few seconds with its beak on this line, it will be found that the creature remains in that position for several minutes. Dr. Yeo, however, says that the line is unnecessary in performing this experiment. Dr. Ralph Vincent (*op. cit.*) relates various experiments he has made on hypnotized cats, rabbits, toads, and other animals.

The plan of changing the nest of a sitting hen, familiar to farmers, probably depends on hypnotism for its success. The fowl's head is firmly held under its wing for a few minutes, and she is carried from one nest to another. She seems ignorant of the change, and continues sitting on the new set of eggs until they are hatched, or she is again removed to another nest in the same way. The drowsy condition induced in many animals by gentle friction of the forehead is a matter of common observation, and I have frequently seen negroes in South America reduced to a condition of drowsiness verging on somnambulism by the gentle stroking of the head and manipulation of the hair, which they seem to be so fond of, at the hands of their womankind.

NOTE 13.—TREATMENT BY TRANSFER.*

The late Dr. Luys, physician to La Charité Hospital, Paris, and a well-known physiologist, introduced a novel kind of treatment of which he expected great things, and which, as he told me, he thought would supersede hypnotism. In company with Dr. Kingsbury, I took

* I thought that this treatment was as dead as poor Dr. Luys, but the late Dr. Forbes Winslow seems to have revived it, and he claims great success (see *Practitioner*, May, 1913).

several opportunities in 1890 of visiting his clinique and seeing his method.

Dr. Luys and his assistants were most kind, and readily showed us the curious experiments described in the *Fortnightly Review* for August, 1890. Several patients were undergoing the new treatment, and we had the opportunity of watching their progress for three or four days, and of questioning them as to their feelings and symptoms. Many of them spoke with enthusiasm of the progress they were making, and in a few cases it was possible to note an improvement from day to day. The process was simple enough. The patient was directed to sit down and grasp the hands of a profoundly hypnotized subject, and Dr. Luys passed a heavy magnetized bar of steel up and down both sitters' bodies, especially pressing on the cardiac and epigastric areas. A shiver was seen to pass through the hypnotized subject's frame, and he began to complain of suffering from the same symptoms as the patient had experienced. The doctor questioned him as to the symptoms, and then assured him that they would be cured and not return—much in the same way as the hypnotizer deals with his patients. In the meantime the patient looked on and saw the transferee writhing in his pains, and imitating his voice, gait, gestures, and demeanour generally. If he were an imaginative person, it is quite likely that he felt better from witnessing this vicarious suffering. When the doctor thought it was enough, he told the subject to wake up and to feel no more pain; and as a matter of fact, he did not remember on waking what he had gone through in the somnambulic state, but went away feeling apparently none the worse, and gratified by a gratuity from the patient whose disease he had shared. Luys contended that the subject not only shares the disease, but partakes of the personality of the patient, and demonstrated this by showing how a female sitter will assume a masculine voice and carriage when sitting for a male patient, and will complain of the beard being pulled if one approaches the face too closely. It is not a little

surprising in this age of science to find a man of Dr. Luys' undoubted honesty and attainments seriously upholding practice of this kind. One is taken back to the time of Perkins and his metallic tractors to find a parallel for what so recently took place in Paris; and be it remembered that remarkable cures did follow the application of Perkins' instruments and of the wooden imitations which the physicians of Bath tested in their hospital practice.*

What, then, is the explanation of the results which follow such methods of treatment? It is summed up in the word 'suggestion.' The imagination is profoundly affected by the hope and expectation of cure, and this in itself is sufficient to bring about a healthy change in the hypochondriacal, hysterical, and *maladies imaginaires*. But among the patients we questioned were some who suffered from well-defined organic disease; one gentleman, affected with aortic insufficiency, assured me that since his visits to Dr. Luys he had recovered his appetite, had slept well, and been able to walk uphill and upstairs, whereas previously he had been sleepless, without appetite, and almost bedridden. A man suffering from paralysis agitans declared he felt a different being, but as far as we could see there was no lessening of his tremor, though the young woman who acted as his transfer reproduced his disordered movements most faithfully. It is evident that in nearly all diseases there exist symptoms—often the most painful part of the malady—of functional nervous origin, and it is these symptoms which are largely met by hypnotic suggestion and other treatments which appeal to the imagination of the subconscious mind. I consider that it is the duty of a physician to relieve suffering in any way, as long as it is not immoral or hurtful; but no one visiting La Charité Hospital can say that the treatment by transfer, as practised there, was free from terrible abuses. It was a sad sight to see to what a deplorable condition of mental instability and inanity the unfor-

* 'Influence of the Imagination in Health and Disease,' by Dr. Hack-Tuke.

tunate subjects had been reduced by continual hypnotization and experiments. Of course, the experiments carried out on such subjects, and under such hysterical conditions as existed in Luys' clinique, are valueless from a scientific point of view; and the phenomena he obtained from the action of the magnet, different coloured balls, and with medicines at a distance, have been sought for in vain by other investigators. I have found my subjects perfectly insusceptible to the magnet, until I have told two or three of them that contact with it will always produce pain in the part touched; henceforth they have always realized my suggestion, and complain bitterly when touched by it, or by any cold metallic substance. When one considers that the personality of a subject in the profounder hypnotic states is in complete abeyance, and that his mind is a blank page, to be written on at the dictation of the hypnotizer, we see how absolutely necessary it is to guard against conscious and unconscious simulation, and how utterly Luys' experiments are wanting in the only conditions which could render them of any value.

As bearing upon the above remarks, I may state that I purposely asked Dr. Luys if the magnet influenced all somnambulists in the same way, and he answered that it did. If he had been more cautious, and had replied that only some subjects were sensitive, one would have been more inclined to believe in the genuineness of his results. The only way of testing the so-called magnetic sense described by Reichenbach is by the electro-magnet, which can be 'made' or 'unmade' instantaneously in a manner impossible for the subject to guess by ordinary sensuous impressions. The inquirer will find in the first volume of the Proceedings of the Society for Psychical Research a report of some experiments made to determine the existence of this sense. The experiments were carried out under rigorous scientific conditions, and proved that certain persons do possess the faculty of perceiving certain effects from the poles of an electro-magnet when in action.

But from this to the propositions laid down by Luys is a very long step.

The use of the magnet in medical practice is nothing new. Hippocrates believed in its virtues, and recommended its employment in painful diseases (Laycock). Throughout the Middle Ages its efficacy was a matter of general belief, and Mesmer and his followers saw an analogy between animal and telluric magnetism. It has been left for Charcot and his school to claim physical reactions from the use of the magnet in our own time. Whether such reactions depend upon pure suggestion, as asserted by Bernheim, or do really proceed from some magnetic influence, is a question which can only be decided by very careful experiments. In my own experience I have seen nothing to warrant the supposition that there is any special quality in the magnet. Krafft-Ebing found that Ilma Szandor was affected by the approach of any metal which she believed to be a magnet, exactly as she had been by the real magnet. However, Charcot got transference of paralysis and other functional troubles in hysterical subjects from one side to the other by passing the magnet over the parts—a proceeding which causes Sir W. Gowers to write: 'The phenomena of transfer (of the genuineness of which, in spite of its rarity out of France, there can be no doubt) show that there must exist an intimate connection between the sensory centres of the two hemispheres, so that the restoration of functional action in a part of the inhibited centre is accompanied by an arrest of action in the corresponding part of the centre on the opposite side. The validity of this inference is independent of the mode by which the phenomena are effected, or of the exact functional change in which they consist' (*op. cit.*, p. 934).

I don't know whether Luys ever applied his treatment to the correction of moral ills. Historians tell us how in the Middle Ages young princes were provided with 'whipping-boys,' whose office it was to bear the penalty incurred by the prince's fault, but from which his august rank was held to shield him. We are told that Edward VI. was of so sensitive a nature that in his case this punishment by deputy was most efficacious.

The physician should be careful in hypnotizing highly-sensitive patients. I know a lady who was under Dr. Van Eeden's treatment for neurasthenia. It was his practice occasionally to treat several patients in the same room, a very large one, putting them into a state of hypnosis, and whispering to each the appropriate instruction. One day he brought this lady into the room where there was already a patient under hypnosis. As soon as Van Eeden began to hypnotize her, she felt as if her spirit was being dragged out of her body by strong cords to where the other patient lay. When she awoke she requested Van Eeden never to treat her again with another patient in the room, as she said she felt as she imagined a person might who was suffering from delirium tremens. The doctor said nothing to her that day, but afterwards told her that the patient who had been in the room with her the previous day was being treated for delirium tremens. Subsequently Van Eeden avoided treating this lady after seeing difficult cases, as he found, if he did so, that many of their symptoms were transferred to her. This transference sometimes acts beneficially—*e.g.*, the case of Mrs. D——, who in 1916 brought her daughter to be treated by me for sea-sickness. My suggestions acted most successfully, not only in the case of the daughter, but on the mother also, who, during her subsequent exceptionally rough voyage to America, experienced no sea-sickness, though previously she had always been a sufferer.

Note 14.—Christian Science Healing.

As far as I understand the method of healing called *Christian Science*, and similar modes of treatment, which, as Sir J. Crichton Browne told us at Leeds, fall legitimately within the scope of medical inquiry, I believe that the cures they have effected in certain neuropathic conditions depend upon the same factors as we have been considering.

Auto-suggestion is a proved exciter of disease and ill-health, and it is easily conceivable that when directed into

healthful instead of morbific channels, it may prove a valuable moral and curative agent.

It is certain that most of those who derive benefit from healthily directed self-consciousness are capable of doing themselves an infinity of harm by morbid introspection if left to themselves.

If a hypochondriacal or nervous invalid can by any means, its name matters not, be induced to look upon himself as healthy and strong, instead of as diseased and weak, a great point is gained, and as he has grown into the miserable creature he imagined himself to be, so it is possible that under different conditions of thought he may realize in his own person some of the perfection upon which he fixes his aspirations. But we must remember that reverie is apt to pass into brooding, and introspection into hysteria, unless very carefully watched. We know also that ecstatics of all times and creeds have succeeded in becoming careless and unconscious of bodily pain and discomfort, but that this deadening of sensation has not saved them from wasting with disease, and dying from exposure and neglect.

Practically, the contention of the Christian Scientist is that he can bring about spontaneously what the physician certainly succeeds in effecting by the aid of hypnotism—viz., the inhibition of some centres, and the dynamogenesis of others. Thus, he will tell you that he can become unconscious of the pain of toothache by determinedly denying its existence and fixing his attention on other things.*

* Some mental healers profess to give absent treatment, claiming that distance is no impediment to successful thought action. I have been told of a lady travelling in Italy being suddenly attacked by facial neuralgia. She telegraphed to her healer in London to give her absent treatment, and soon she began to feel better, and ultimately got well. She triumphantly gave her own case as a proof of the truth of the system to her sceptical companion, and was much disconcerted when it turned out that the healer never received the telegram, as he had left town. The faith of the patient proved the curative force. I am sometimes asked to give 'absent treatment,' and once a gentleman suffering from tabes dorsalis wrote to me from Colorado Springs, U.S.A., wanting me to treat him, asking my fee, and whether I guaranteed cure—*Populus vult decipi.*

He says 'mind is all,' and that the body takes its shape from it as the overcoat does from the body. A flippant American critic has observed, apropos of this simile, that a man cannot raise himself off the ground by pulling on his own boot-straps.

Christian Scientists ride their hobby literally to death, as recent coroners' inquests and trials for manslaughter show. The death of Harold Frederick, the novelist, whilst under the care of a lady practitioner, was followed by a coroner's inquest, and the healer was committed for trial on the charge of manslaughter. She was, however, acquitted, and the point seems conceded that a man or woman of sound mind is entitled to choose for himself or herself in the matter of medical attendance; and that a 'healer' acting in good faith is not likely to be convicted.*

An interesting exposure of some of the most objectionable features of the movement is supplied by Miss Alice Fielding's book, entitled 'Faith Healing and Christian Science,' London, 1899.

The following case, which has been recently reported to me, illustrates one of the dangers of Christian Science:

* There were two interesting trials of Christian Scientists in 1906, and some new points were raised. The first was tried by Mr. Justice Bigham, and was the case of a registered medical man—Dr. Adcock—who had given up practice and become a Christian Scientist. The patient, Major White, died of blood-poisoning, the result of neglected bedsores, and Dr. Adcock, being in attendance, was charged with manslaughter. As a medical man he was bound to show professional knowledge and skill; but it was asserted that he attended the deceased, not as a medical man, but as a 'healer' and friend, and therefore escaped professional responsibility. The jury disagreed, and ultimately the prisoner was discharged.

The other case was that of Mr. Chisholm, tried by Mr. Justice Grantham. He was charged with manslaughter, in that he had refused to call in medical aid for his child, who had died of diphtheria under Christian Science treatment. The healer mistook the disease for mumps, and used no material remedies. After some severe remarks by the Judge on the folly of people preferring quackery to scientific medicine, the prisoner was found guilty, and bound over to come up for judgment if called upon; his fate, therefore, being much better than that of many unfortunate 'peculiar people' whose conviction and punishment one sometimes reads of in the newspapers.

Captain B——, an officer living at Aldershot, went out cycling with a friend who was a firm believer and wanted to convert him. Captain B——, after a mile or two, complained of pain in the abdomen and wished to return, but his friend assured him that it was only 'mortal mind,' and that he must deny the pain and it would disappear. So the ride continued, and at the end Captain B—— was in a very prostrate and painful condition. A doctor was called in, who diagnosed peritonitis, and the patient had a severe illness.

Failure to understand the gravity of the pathological condition in this case nearly cost the patient his life; but according to Mrs. Eddy, the arch-priestess of the cult, all diseases are the result of error of thought, and are to be treated on the same principle; medical diagnosis is but a pandering to error and 'mortal mind,' and therefore to be severely discouraged. There is a great deal of half-truth mixed up in the absurdities of this creed, and we all know that this mixture makes falsehood the more dangerous.

Unlike the 'peculiar people,' who often figure in the courts as having contributed to their children's deaths by refusing to call in medical assistance in illness, the Christian Scientists appeal to the wealthy and cultured classes both in America, the country of its birth, and in England, and it is quite extraordinary the vogue it has acquired among the upper classes. Some people like to be told that they are gods, and possess all potentiality within themselves. The movement is, according to theologians, creating and reviving all kinds of religious as well as medical heresies. It is therefore arousing much controversy and opposition among orthodox Churchmen.*

* I was recently asked by a medical friend to investigate the claims of a mental 'healer,' and I consented to let him try on one of my patients. The healer's method was to make the patient recline at ease in a chair and reason with him as to the needlessness of suffering and pain. He got him into a hypnoidal state by this means, and then sat in silence by his side 'holding the thought of cure in his mind.' The patient was not benefited. This healer had the theory that disease was caused by the obsession of evil-discarnate spirits, and they had to be cast out. He had quite a large practice, and when addressed as 'doctor' once

I have frequently succeeded, following Dr. de Lagrave's hints, in awakening at a predetermined moment, and no doubt anyone with a little practice will be able to do the same thing; but I imagine that the other effects of auto-suggestion which he relates are only to be attained by hysterical or neuropathic subjects.

Such experiments afford additional proof of the correctness of Bernheim's theory, that in hypnotism it is the patient who hypnotizes himself, and that it is the evocation of his own forces (under the stimulus of suggestion) which constitutes the curative agency in the treatment. Surely this is a better and nobler conception of the power in every way than that current before Braid's time, and still held by unscientific 'magnetizers,'* which would have us believe in a subtle fluid passing from operator to subject.

Dr. Byrom Bramwell, speaking of the important part voluntary effort plays in cases of paralysis, instances that of the late Mr. Horatio Ross, a celebrated sportsman.† When some eighty-two years of age, Mr. Ross was attacked with hemiplegia, which was, perhaps, embolic. He was seen by a distinguished neurologist in London, who, considering the advanced age of the patient and the very serious nature of the attack, gave a very unfavourable opinion, saying that he would never use his arm again. Shortly afterwards he came to Edinburgh, and placed

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replied that he was not a doctor, but a healer, adding that doctors did not heal but only treated their patients. Another very prosperous healer I have met is a retired army colonel. He also thinks disease proceeds from spirit obsession. To remove it he stands opposite the patient, and makes violent gestures of expulsion, accompanied by commands given with military directness and energy. I find many people one would never suspect hanker after quackery, and only call in orthodox doctors when they have suffered in health and pocket from the operations of quacks.

* The alleged discovery of N rays by Dr. Blondlot, of Nancy, a few years ago gave believers in animal magnetism great satisfaction, for in these emanations from nerve structures in action they saw the vindication of their claims. Unfortunately for them, Sir W. Crookes and other scientific investigators consider the evidence altogether illusory.

† 'Studies in Clinical Medicine,' vol. i., No. 6.

himself under the care of Dr. Foulis, who had previously attended him. When he consulted Dr. Foulis, the paralysis of the arm, though not absolute, was very great; the legs, as is usually the case, had to a much greater extent recovered.

'Dr. Foulis, who is a firm believer in the beneficial effects which frequently repeated voluntary efforts produce in cases of paralysis, explained to Mr. Ross the importance of making frequent and systematic efforts to throw the paralyzed muscles into voluntary contraction. Mr. Ross, who was a man of iron will as well as (in his younger days) of iron muscles, fully appreciated the rationale of this method of treatment, and set himself diligently and with firm determination to carry it into effect. Many times every day he endeavoured to perform each of the individual movements which the hand, forearm, and arm are capable of making. The paralyzed muscles soon began to regain some power, and each day, and almost all day, he diligently practised some form of muscular movement. I was asked to see him some two months after he had commenced this treatment, with the object of advising whether electricity would be beneficial. He had then regained considerable movement in the paralyzed arm and much more in the leg. He continued to practise his muscular gymnastics, and in the course of three or four months he had practically recovered; he could, in fact, make such good use of his paralyzed arm that, on the following 12th of August, he was able to get on to the moor and actually to shoot several brace of grouse.'

Dr. Bramwell attributes Mr. Ross's rapid recovery to the exercise of the will-power, as each voluntary effort tends to act as a stimulus which travels along the damaged nerve tract and forms a path for motor impulses.

In support of this theory he reminds us that after facial paralysis the orbicularis palpebrarum is the first muscle to recover its tone, on account, he thinks, of its great functional activity. In consequence of the immense number of times each day the reflex stimulus from the conjunctiva

—inclination to wink—is applied, the nerve tract is continually being stimulated by impulses which endeavour to force their way through the lesion, and this repeated stimulation leads to rapid repair of the damaged nerve fibres.

The important part will-effort and concentration of purpose play in muscular development and renovation of tissue is seen in Swedish gymnastics, and in the method practised in America under the name of psycho-physical culture. We have much to learn of hypnotism as a stimulator of effort and arouser of the will; it is in this direction the power should be used, and not as a supplanter or enfeebler of individuality.

Note 15.—Spiritual and Mental Healing.

A committee composed of eminent doctors and clergymen—including the Dean of Westminster, the Bishop of Stepney, Sir Douglas Powell, Sir J. Rickman Godlee—a few years ago considered the rationale and genuineness of reported cures. I was asked to give evidence, and did so with pleasure. But I had to confess I knew nothing about spiritual—*i.e.*, miraculous—cure except what I had read in Dr. Boissarie's 'Annals of Lourdes' and similar books. The evidence brought forward always seemed to me to fall just short of scientific proof of cure of organic disease.

I have read of ununited fractures of months' standing being rectified by twenty minutes' immersion in the Grotto of Lourdes, and I have heard Father Gerrard, S.J., say he would go to the stake if required to prove the truth of such stories. Mr. Eccles asked me if I thought a hare-lip could be made normal by prayer or other spiritual means, and I replied that I could not conceive such a thing. Devout clergymen and doctors would say that God works through His agents and by natural laws, and it would be as reasonable to expect Him to make a chemical experiment turn out as the experimenter wished, when, through carelessness or ignorance, the wrong reagents were used, as to expect Divine interference in sickness or injury

brought about by man's defiance of natural laws. We must work on scientific lines, and as we have seen in our own times scientific miracles achieved in the elimination and cure of tuberculosis, enteric, malarial fevers, etc., so our children may see nearly all diseases successfully dealt with, and preventive take the place of clinical medicine.

The Rev. Drs. Worcester and McComb, of Emmanuel Church, Boston, U.S.A., have for some years carried on a most successful system of mind-cure and hygiene in co-operation with the best doctors of the city. The two professions felt the need of making a united effort to combat Christian Science in its stronghold. The clergy take no fees, and only act under medical supervision. The Rev. Mr. Waldron, Vicar of Brixton, directs a similar movement in his parish, and the practice of unction for the sick, not to be confounded with extreme unction for the dying.

'Incantations and quinine will cure most fevers,' said an old priest, 'but don't forget the quinine.'

The Bishop of Worcester quotes, in his address to the Lambeth Conference, 1908, on the Anointing of the Sick: 'The Committee believes that the Faith which realizes Christ's Presence is capable of creating a heightened vitality of spirit which strengthens and sustains the health of the body. . . . Those who believe themselves to be endowed with healing power should be urged diligently to fit and prepare themselves by scientific medical study for its proper exercise.'

Note 16.—Hypnotism and Crime.

Recent events, and especially the Gouffé trial in Paris, have brought the question of the employment of hypnotism for criminal purposes prominently before the legal and medical professions, and a word on the subject will not be out of place here. It is very fully discussed by Dr. Liégeois in his book, already referred to, and Mr. Taylor-Innes, of Edinburgh, has treated it at some length in an article in the *Contemporary Review* for October, 1890.

Mr. Brodie-Innes states the case in the *Juridical Review* for January, 1891. Dr. Kingsbury has written an able criticism on the former article in the *Nineteenth Century* for January, 1891, in which he throws great doubt on the possibility of criminal acts being suggested and carried out in the hypnotic or post-hypnotic state; and his arguments, so far as they go, are conclusive. Charcot, also, and his school discredit the idea that hypnotism can be made the vehicle for criminal suggestion; and contend that the subject was perfectly aware of the harmless nature of the act he was committing when, in obedience to Dr. Liégeois, he seized a paper-knife on waking, stole to his wife's side, and stabbed her to the heart. He knew it was acting, and did his part well, that is all—so explains Milne Bramwell. The same thing applies to other test criminal actions, as, for instance, the theft of jewellery, or the discharge of a revolver loaded with blank cartridge, either at the patient's own breast or at a stranger's. The subject knew about the trick, and the experiment was simply a laboratory one, which would fail if put to a real test. We here see a curious circumstance, and one which, to my mind, is strong testimony to the thoroughgoing honesty of the Nancy school. They are engaged in strenuously maintaining that in hypnotism the evil-disposed have a weapon which will give them absolute power over their agents, and ensure the accomplishment of crimes without any risk to themselves. What contention could possibly be more fatal to the extended employment of hypnotism which they advocate, or more certain to arouse popular feeling against the treatment? I consider that the question should be met with perfect frankness, and agree with Mr. Brodie-Innes that lawyers should seriously study the possibilities of hypnotism. In approaching the matter, it is necessary to bear in mind a few points in order to be able to arrive at a proper conclusion. In the first place, only a small proportion of the population are sufficiently affected by hypnotism to be reduced to automatism or powerlessness. In a

large number even of these the loss of will and self-control is not sufficient to render the subject absolutely helpless, and in many cases where there is apparent helplessness personal violence or criminal suggestions would restore complete consciousness and the power of resistance. It is difficult, and often impossible, for even a skilful medical man to judge of the precise depth of sleep; and so pronounced a somnambulist as Mrs. H—— often retains a degree of latent consciousness, and remembers subsequently things I have said to her in the hypnotic state; but no doubt criminal assaults might be committed on women while in the deepest sleep, and in some cases there would be no subsequent recollection of the circumstance. Here we have exactly analogous abuses of chloroform and other drugs, and the criminality should in each case be considered the same. The chief point of interest is not whether hypnotism may be used as an anæsthetic for the performance of brutal outrage, but whether it may be used with any prospect of success as the vehicle for criminal suggestion. I believe that, under certain circumstances, it might be so used, and I here give my reasons for the belief. Hypnotism acts chiefly, as we have seen, by immensely increasing the capacity for receiving, and the desire to act upon, suggestion. It is this property which we make use of in dealing with drunkards and morphinomaniacs, and our suggestions of abstinence and self-control are received and acted upon in proportion to the depth of sleep attained and the natural receptivity of the patient. I have, however, seen suggestion curative in a case of chronic drunkenness where the influence of hypnotism was barely discoverable, and I have seen it fail where somnambulism was induced. In the first case the patient's desire was for cure, and the natural force of moral suggestions had to be but slightly increased in order to obtain success; whereas in the latter instance the patient had no real desire to give up his bad habit, and the suggestions found no soil in which to take root. I see no reason for supposing that a somewhat

similar result would not follow criminal suggestions. It would be vain to make criminal suggestions to the disciplined and moral man, for he would either wake up at once or would ignore them; but it would be an easy task to corrupt the naturally weak and ill-disposed. If, as has already been said, one told a sincere teetotaler that on waking he was to drink a glass of brandy, it is certain that the suggestion would fail, no matter what was the degree of sleep induced; but the half-hearted abstainer might perhaps succumb, just as he would yield to the pertinacious solicitation of his ordinary companions, because the wish to abstain was not strongly grounded or an essential part of his individuality.* Dr. Norman

* This theory is borne out by some experiments made by Professor Lombroso, of Turin ('Studi su l'Hypnotismo,' Turin, 1886). He hypnotized two medical students of good character and suggested to them that they were to steal some articles of value. One of them woke up crying, 'No, I will not be a thief'; and the other, after much opposition, did seize the things, but almost immediately threw them from him. On the other hand, the same physician found that a hysterical young woman of doubtful character received with evident satisfaction the suggestion that she was a thief or a brigand, but resisted the assertion that she was a savant or moralist, and declined to give a disquisition on the beauty of virtue. I have never gone so far as to suggest criminal acts to my subjects, and I should regard such a course as very objectionable; but I have suggested lines of conduct opposed to the disposition of the patient, and I have generally seen the order ignored or very partially obeyed. For instance, I suggested to a brother Mason whom I had hypnotized some scores of times, and who is one of the best subjects I have ever seen, that he should tell the secrets of the craft. He became extremely disturbed, and vigorously protested that nothing would induce him to break his oath in such a manner. This patient was so susceptible to my suggestions that if I told him during the hypnotic state that his tie—a red one—was green, he would accept the suggestion and stoutly maintain on waking that it was green. Another patient, who is also a profound somnambulist, though a man of great muscular strength and keen intellect, carries out ordinary post-hypnotic suggestions with accuracy, but when the suggested act is contrary to his volition, he argues the point and does not execute it. For example, I tell him that five minutes after waking he is to take a pin from a pincushion and stick it into the curtain. He does so in a somewhat shamefaced manner, and perhaps says afterwards that he does not know why he did it, but that he felt he must. But when I tell him to pay me a visit at two o'clock on Saturday—the time when he pays his men—he tells me that the thing is impossible,

Kerr's objection to hypnotism, that, if it enables the physician to cure a drunkard, it will enable a scoundrel to debauch a sober man, is extremely fallacious; he might as well forbid the surgeon to use a knife because criminals sometimes murder people with knives.

It is my opinion, and also my experience, that the power in us for good is more potent than that for evil, and that it would be very much harder to make the good man do wrong than to influence the bad man for good. But hypnotism acts by increasing the normal impressionability to suggestion; and as a moral person of unstable character may be corrupted in time by vicious surroundings and evil influences, so I believe the same person could be more quickly and surely corrupted by evil suggestions made to

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and I am unable to persuade him to consent (see also Dr. Forel's case, p. 189).

Dr. Kingsbury was able to demonstrate this point before the meeting of the British Medical Association in 1890, for his subject, a Manchester merchant, refused to execute any order opposed to his natural disposition.

In the *Dublin Journal of Medical Science*, May, 1891, Sir F. Cruise relates how he saw Dr. Bernheim endeavour to extract a man's political opinions while in a state of profound hypnosis. The patient declined to tell them, and, folding his arms, said, 'C'est mon affaire.' 'What a remarkable contrast to the awkward confessions occasionally volunteered under the influence of chloroform or ether!' is Dr. Cruise's comment on this incident. On the other hand, Liébeault records how, by telling a young girl that he was her father confessor, he succeeded in obtaining her confession. The result must depend upon the patient's disposition and character. For instance, I told one hypnotic patient that she was to resist my suggestions, and yet she was unable to do so, whereas another patient not only resisted my suggestions, but awoke when I insisted upon them. In the debate on hypnotism at the Edinburgh meeting of the British Medical Association, 1898, Dr. Mercier asked if a hypnotized butcher might not be made to murder a man by being told that the victim was a sheep, and that he had to cut its throat in the ordinary exercise of his trade. I think the answer is in the affirmative. Bernheim made an experiment of this nature when he made an honest woman steal another patient's watch. At first she indignantly refused, saying she was not a thief; but when Bernheim assured her it was her own watch which the other woman had purloined, and that she was, therefore, only regaining her own property, she took it without further scruple. It seems to me better to face a danger and take steps to combat it than to deny or ignore it.

him while in the hypnotic state. I have no doubt that many of the subjects taken about with them by travelling showmen have entirely lost all individuality, and have become passive instruments in the hands of their employers. To reduce a fellow-creature to such a condition is, I hold, one of the greatest offences which can be committed against the dignity of humanity; for the position of the unfortunate victim is worse a hundredfold than that of the captive who has only to submit to material slavery. It is witnessing degrading performances, and confusing the travesty with rational hypnotic treatment, which makes many well-meaning people look with horror on the present spread of the knowledge of hypnotism. There is a simple means of doing away with much of the danger which may attend its popularization. Let it be regarded as a medical procedure, to be had recourse to only for definite therapeutic purposes by qualified medical men, or as a method of real scientific research in the hands of savants. Let the public be made acquainted with the dangers which attend its use by improper persons, and let its employment in public for purposes of gain or mere amusement be sternly forbidden in England, as it is in other countries.

I do not think the ordinary criminal will ever make use of hypnotism; it is too tedious and uncertain a process. There have been accounts in the papers of various crimes alleged to have been committed by its means. Some boys in Pesth were a little time ago stated to have robbed their masters' till in obedience to hypnotic suggestion, and an ingenious newspaper correspondent was quite sure that the Whitechapel murders were the work of someone acting under hypnotic influence! My opinion is that the malefactor, unfortunately, finds plenty of material ready to his hand without hypnotism, and that the weak and criminal actions of bad men and women are capable of a much simpler explanation.

Supposing that a hypnotizer got absolute control over a subject, and rendered him so sensitive to his suggestions that he could induce him to commit thefts and other

crimes, and at the same time be unconscious of the prompting which had impelled him, could the subject be hypnotized by another person, and made to give up the secret? I believe he could after a longer or shorter period, and that the real criminal would then be discovered. Moreover, the person acting under controlling suggestion would almost certainly perform the action in a manner different to his ordinary behaviour. He would appear more or less dazed, and would probably make either no effort, or only a very inadequate one, to escape capture.

In the event of a criminal action being committed through hypnotic suggestion, expert evidence will be forthcoming to completely establish the case.

I think, however, a false plea of having acted under hypnotic compulsion is a much more probable event than the perpetration of crime through such agency. It is not unlikely that we shall have persons demanding blackmail for alleged felonious hypnotization, as we have had from time to time similar accusations of administering chloroform.*

The alleged dangers of hypnotism may be ranged, then, under three heads: As they affect the morals, pocket, and health of the subject.

First, those to which the patient is liable while actually in the hypnotic trance. These embrace crimes of violence, and especially indecent assault or violation. The use of chloroform is attended with the same risk, and criminal reports show that there is real danger of this abuse. I

* It looks as if the plea of having acted under hypnotic suggestion is to become a matter of course in French *causes célèbres*. The papers have been filled with the reports of a sensational trial in Algeria. A Madame Weiss was found guilty of attempting to poison her husband, and she pleaded that she had acted under the control of her lover, who had hypnotized her, and whose suggestions she was unable to resist. The woman was thoroughly degraded, and her accomplice was an unscrupulous villain; but the whole affair was a commonplace crime enough, and easily explicable without calling in the aid of hypnotism. For how many crimes, seductions, and accidents is alcohol responsible! It is right, therefore, to educate the public on the subject, as is now being done in many schools.

venture to think that there is less danger on this score from hypnotism than from drugs, on account of the comparatively small number of persons who are susceptible to such a degree as to become anæsthetic and amnesic.

The second danger is a much more serious one, and if the allegations made against the abuse of mesmerism were true, they went far to justify the attitude the profession adopted towards it fifty years ago. It was alleged that persons became absolutely under the control of the mesmerist, and that such control could be, and on many occasions was, exercised not only during the mesmeric sleep, but subsequently, for purposes of immorality and to extort money. It was even believed that this power could be exercised at a distance, and against the will of the subject.

More evidence of the possibility of the operator being able to influence the subject at a distance is still wanted, but the experiments of Professor Pierre Janet, of Havre, and Professor Liégeois, of Nancy, seem to show that under special circumstances and in rare instances a subject who has been hypnotized a great number of times by the same operator may be sent to sleep by the hypnotizer exerting his will from a distance. I have come to this conclusion with extreme unwillingness, for it seems to open up the possibility of a man or woman being reduced to a state of complete mental and moral slavery.*

* Examples of this are given in the works of Liégeois, Liébeault, and Bourru and Burot. Liébeault describes a series of experiments with Camille, a very hysterical subject well known to those who have visited Nancy. Camille, unconscious of the experiment, was in Dr. Liébeault's garden, and Dr. Liégeois in the dispensary. The distance between them was 29 metres, and subject and operator were concealed from one another by a thick hedge. Dr. Liégeois simply fixed his mind on the idea of making Camille sleep. In eight minutes she was actually asleep, and it was found that she was *en rapport* with the Professor and with no one else. He had hypnotized this subject a great number of times, and the experiment failed when Dr. Neilson endeavoured to repeat it under the same conditions. Dr. Beaunis, however, who had also frequently hypnotized her, was also able to send her to sleep from a distance (Liébeault, *op. cit.*, p. 275).

I believe such dependence can only be possible in cases where the hypnotist has dominated the same subject a very great number of times, and then only in very exceptional cases. We have the consolatory legal maxim, *de minimis non curat lex*, but I think attention should be drawn to the possibility of such a thing with a view to averting its occurrence.

The Nancy theory of the all-powerfulness of post-hypnotic suggestion introduces an additional element of danger into the practice of hypnotism, and if Liégeois's ideas were justified, they would, I think, afford a very grave argument against the popularization of the treat-

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Drs. Gibert and Janet experimented on Mde. B——, at Havre, in the presence of several competent witnesses. They succeeded in sending her to sleep by mental suggestion when she was some kilometres from them, and ignorant of what was going on. But they failed to influence her to commit definite acts. They could also awaken her by mental suggestion from a distance (Bourru et Burot, 'La Suggestion Mentale,' p. 160).

I have several times made a similar experiment on two or three of my most susceptible subjects, and have tried to hypnotize them by directing my thoughts on the purpose in view at various distances, but I have never noticed any effect. While, therefore, admitting its possibility, I feel convinced that the phenomenon is very rare. Hypnotism here, as in other directions, merely intensifies existing states. The researches of the Society for Psychical Research have completely proved the reality of telepathic influence; and hypnotism, by withdrawing the mind from the life of relation, intensifies the sensitiveness of those few persons who are susceptible to telepathic impressions.

It is a very common error to suppose that all persons in hypnotic somnambulism are mediumistic and have extraordinary powers. I have found people who are dull and phlegmatic in the waking state are at least equally so when hypnotized, and the people who are imaginative in the normal state become more so when hypnotized. Camille, for instance, thought herself clairvoyant when hypnotized, and would answer questions as to the future, diagnose disease, and suggest remedies. Dr. Liébeault used to humour her in that way, and I have seen her make shrewd guesses and absurd mistakes. Such is also the experience of Forel, who is professedly sceptical about things occult. He tells, for instance, of a patient he attended who was a professional medium, and was worn out by her work. He tested her powers in various ways, and found she was guided entirely by her visual and other impressions, which were generally quite faulty. She began to get better under hypnotic treatment, but her husband became alarmed and took her away, fearing interference with her 'mediumship,' and consequent loss of income.

ment. But most observers regard these ideas as exaggerated and somewhat fanciful, and the dangers opened up by them as chimerical. Still, the fact remains that there are a few persons in every thousand who are so influenced by suggestion as to be incapable of resisting the orders of the hypnotist even after long intervals of time, and who can be made to execute these orders as of their own initiative, and without being conscious of their source.

Occupying a somewhat middle ground between these two dangers is the risk of a person being made to sign cheques, forge documents, make promises, etc., while in a state of lucid somnambulism. Thus, Dr. de Watteville easily persuaded the 'Soho sleeper' to sign an I O U. But this danger does not appear to me at all so serious as that arising from post-hypnotic suggestion, for the subject would be able on waking to recognize the fact that he had been fraudulently dealt with, and to offer opposition subsequently. Moreover, the danger of such fraudulent proceedings is not confined to hypnotism, for signatures and promises have been extracted from persons through the instrumentality of intoxicating and stupefying drugs, and the law knows how to deal with such abuses.

The third alleged danger is happily non-existent. When hypnotism is carefully employed for therapeutic purposes, injury to the subject's physical, moral, or mental health is never caused. That careless and ignorant tampering with hypnotism is dangerous has been sufficiently shown by the cases I have cited, in which grave nervous disturbances have been proved to follow its illegitimate employment (*vide* p. 123). There is still another danger attending its popularization which medical men will do well to be on their guard against—viz., blackmailing and false accusations—for they may be accused of improper conduct in respect to hypnotism, just as they are with regard to chloroform.

It is to be hoped that this possibility, while making

them very careful, will not prevent them recommending the use of hypnotism when the patient's condition is such as to benefit from it.

Note 17.—The Hypnotic Will Case.

In July, 1898, there was a sensational law case in which I was subpœnaed to give evidence. Dr. Kingsbury, of Blackpool, was appointed executor and residuary legatee under the will of an old lady patient. The son as heir-at-law disputed the will on the ground of undue influence, and it was alleged that the doctor had hypnotized the patient, and by hypnotic suggestion had got her to make the will in his favour. The charge entirely broke down, and Dr. Kingsbury won the verdict.

It came out in the evidence that Mrs. Howard was on bad terms with most of her family, including the plaintiff, that she was greatly attached to Dr. Kingsbury, and that he had been very devoted in his attendance on her for more than ten years, and was her confidential adviser in all her difficulties. They used to talk a good deal about hypnotism, in which she knew he was much interested, and in 1894 she asked him to try to hypnotize her, as she suffered from sleeplessness.

Dr. Kingsbury consented to try, though he told her he did not think hers a suitable case. He was seeing her daily, and every day for three weeks, in the presence of her maid, he endeavoured to influence her hypnotically. But the attempt failed, and he fell back upon ordinary treatment.

Sir Edward Carson, K.C., laid great stress upon the number of times Dr. Kingsbury hypnotized his patient, and the jury was asked to imagine the old lady lying helpless under his suggestions. Sir Edward Clarke, however, was able to put a different complexion on the matter, and the jury decided for Dr. Kingsbury.

In this case it was evident that hypnotism was introduced to prejudice the jury, and it is quite possible that had Dr. Kingsbury's position been less established at

Blackpool he might have lost the suit. An interesting feature of the case was the evidence of Sir William Broadbent, who was called by Dr. Kingsbury. He was a member of the Hypnotic Committee of the British Medical Association, and he expressed in court his continued adherence to the opinions therein set forth. Under French law the legacy would have been invalid, for in France medical men are not permitted to benefit from wills of persons under their care.*

* It is interesting to note that since the foregoing account was written (1900) Dr. Kingsbury has changed his profession, and as a barrister is now, apparently, the standing counsel for Christian Scientists committed for trial by coroners and magistrates for manslaughter. I understand that it is largely owing to his able advocacy that the prisoners in two recent cases have escaped punishment. Dr. Kingsbury's extensive medical experience has revealed to him the weak places in our medical armour, and he makes full use of his knowledge.

I have met with two cases which show the caution necessary in dealing with hypnotism. Strangely enough, I was consulted in both instances on the same day. The first case was that of a young lady of good education and position. She thought herself the victim of a plot hatched by two young men of her acquaintance to influence her telepathically; and she was under the impression that they could at any time direct her thoughts and actions from a distance. Though she had never been hypnotized, she supposed that hypnotism had something to do with it.

I found her, like all persons who suffer from a fixed idea, very difficult to hypnotize, but after six attempts I succeeded in inducing a state of mental receptivity, with inability to open the eyes. I suggested that she would become insusceptible to telepathic influences, and would recover her self-confidence and spirits. She almost immediately began to feel stronger in mind and less hysterical, and in three weeks she went home, thoroughly convinced that in future she was proof against such influences. Suggestion alone did not suffice to remove the false ideas, for several medical men and others had tried argument in vain. The idea was too deep-seated to be stirred by ordinary methods, and from the way things were tending, I have little doubt but that the patient would very soon have drifted into melancholia or dementia. Her suspicion that hypnotism had something to do with her symptoms is interesting. There is no doubt but that as the subject comes more into vogue we shall find a great number of persons will imagine themselves victims of this, to them, mysterious agency. The electric telegraph and telephone have been credited by scores of insane persons with being the source of their troubles, and hypnotism is a very likely thing for the mental patient on the lookout for a delusion to take up.

The other case was more serious, and led to a great deal of trouble. A lady who has for years carried on reformatory work in a Midland town was greatly impressed by the evidence she

Note 18.—False Evidence and Suggestion in Legal Cases.

Though this book is chiefly concerned with the medical aspect of hypnotism and suggestion, attention has been directed to the important rôle they play in all relations of life. Lawyers, clergymen, and schoolmasters must study the subject from their professional standpoint if they wish to keep abreast of the times. I have referred to Professor Bernheim's experiments (see note p. 81) in foisting imaginary actions and even crimes on highly suggestible subjects, even in the waking state. For instance, he got a phthisical patient who had been bedridden for weeks to affirm that he had seen Professor Liégeois knock a man down in the Rue St. Dizier the day before. The man became so convinced of the truth of the story that he swore to it before a gentleman who posed as a *juge d'instruction*. Professor Forel (*op. cit.*, p. 147) relates similar experiments, especially with children, also without hypnotism. For example, he said suddenly to Miss X—— that a young man who had just then entered the room had stolen her purse a month ago at the railway-station. She at first looked surprised, but almost at once acquiesced, said she remembered it perfectly, and demanded his punishment; moreover, she added details out of her head, such as the amount in the purse, etc. In a sensational

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had heard of the success of hypnotism in curing the craving for drink, and instead of procuring the services of a medical man, she experimented on some of her girls herself. Girls of this class are notoriously susceptible to hypnotism, and she found no difficulty in sending five out of the seven she operated on into somnambulism. The result surpassed her expectation, and three of the five girls seem to have been absolutely cured, and to have remained perfectly sober ever since. Two of the others, influenced by bad companions, turned upon the unfortunate lady, accused her of having hypnotized them for immoral purposes, and made the situation altogether very uncomfortable for her. I have hypnotized many women of the same class in institutions, and have never noticed anything peculiar; but this lady tells me that on each occasion she hypnotized those girls they awoke in a somewhat dazed state, and were under the impression that they were with their former companions and in their old haunts.

trial at Buda Pesth a few years ago some Christian children swore to the kidnapping and murder of a companion by Jews for sacrificial purposes. The idea had been suggested to them so imperatively that they believed in the reality. Imaginative children are often punished for lying when their only fault is self-deception. One sees the same confusion of fiction with fact in hysteria, delirium, and general paralysis of the insane. It is important to recognize the possibility of this form of false witness. It is most dangerous to the accused, for the witness thinks himself speaking the truth, and is correspondingly plausible and convincing. In a difficult case hypnotizing the witness would probably elucidate the real facts.

Many barristers are masters of the art of suggestion, and can make a weak witness contradict himself almost at pleasure; they even use the expression 'I suggest.' A provincial coroner tells me he has to be most careful in his examination not to suggest incidents to country witnesses; they are so apt to accept them. The committal of a much-talked-about crime is very likely to be followed by others similar to it, the outcome of imitation and suggestion; and one sees how after a murder weak-minded but innocent persons often cause much trouble to the authorities by false confession and self-accusation.

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As the question of the State regulation of the use of hypnotism may at any moment become a burning one, I here append the draft of an Act which was approved by the Royal Belgian Academy of Medicine, and discussed by the Belgian Parliament in 1891. It is now, I believe, the law of the land.

LÉOPOLD II.,

ROI DES BELGES.

À tous présents et à venir, Salut.

Sur la proposition de Notre Ministre de la Justice,

NOUS AVONS ARRÊTE ET ARRÊTONS:

Notre Ministre de la Justice est chargé de présenter, en Notre nom, aux Chambres législatives, le projet de loi dont la teneur suit:

ARTICLE 1.

Quiconque aura donné en spectacle au public une personne hypnotisée par lui-même ou par autrui, sera puni d'un emprisonnement de quinze jours à six mois et d'une amende de vingt-six francs à mille francs.

ARTICLE 2.

Quiconque, n'étant pas qualifié pour exercer l'art de guérir, aura hypnotisé une personne qui n'avait pas atteint l'âge de dix-huit ans accomplis ou n'était pas saine d'esprit, sera puni d'un emprisonnement de quinze jours à un an et d'une amende de vingt-six francs à mille francs, alors même que la personne hypnotisée n'aurait pas été donnée en spectacle au public.

En cas de concours avec les infractions punies par les dispositions légales concernant l'art de guérir, la peine prononcée par le présent article sera seule appliquée.

ARTICLE 3.

Sera puni de la réclusion quiconque aura, avec une intention frauduleuse ou à dessein de nuire, fait écrire ou signer par une personne hypnotisée un acte ou une pièce énonçant une convention, des dispositions, un engagement, une décharge ou une déclaration. La même peine sera appliquée à celui que aura fait usage de l'acte ou de la pièce.

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INDEX

Absent treatment and self-suggestion, 225 *n.*, 386 *n.*
Abuse of hypnotism in Paris Hospitals, 382
Acute disease, hypnotism in, 68, 201
Adolescent insanity, hypnotism in, 112
Advertisement and suggestion, 49
After-influence of hypnotism, 171
Age of patients, 176
Agoraphobia, case of, 326
Aids to hypnotism, 234 *n.*
Alcoholism and hypnotism, 95, 280
  chronic cases of, 95, 316
  effect on memory, 151
Allan, Dr. Percy, 203
Allbutt, Sir Clifford, quoted, 226
Amateur hypnotism, 124
Amaurosis, hypnotism in, 67
Amenorrhœa, hypnotism in, 309
Amnesia in hypnosis, 136
Amyl nitrite and hypnosis, 73, 136
Anæmia cured by hypnotic treatment, 321
  predisposes to hypnotism, 262
  produced by emotions, 24
Anæsthesia by suggestion, 10, 81
  in hypnosis, 190, 224, 281
Analogies of hypnosis, 266
Animal alkaloids and sleep, 268
  magnetism, 5, 53, 118
Animals, hypnotization of, 379
Anodyne, hypnotism as an, 15, 83, 215
Ansel Bourne, case of, 103
Aphasia, case of, cured by hypnotism, 231
  hypnotic, 144
Arthur's, Dr. R., practice, 13, 57
Association of brain centres, 135
  of ideas and conduct strengthened by hypnotism, 96
Asthma, case of, cured by hypnotism, 328
  hypnotism in, 231
Auto-hypnosis, 21, 123
Automatism, 135
Auto-suggestion, 21, 87, 225, 379
  experiments in, 375
Awaking, methods of, 52, 261
Azam's, Professor, case, 101

Bad habits cured by hypnotism, 112
Bad heredity corrected by hypnotism, 113, 205
Barnett, Canon, quoted, 235 *n.*
Barwise, Dr., quoted, 136, 142, 199, 235
Battlefield, terror of, 356
Beaunis, Professor, experiments of, 62, 72, 78, 258
Belgium, regulation of hypnotic practice in, 405
Berillon, Dr., 5, 18, 113
  and degenerate children, 205
Bernheim, Professor, 2, 57, 81 *n.*, 275
Blisters caused by suggestion, 73
Braid, James, of Manchester, 7, 209
Brain-fag, hypnotism in, 85, 296
Bramwell, Dr. Byrom, quoted, 389
  Dr. Milne, 4, 79, 166, 216, 224, 231 *n.*, 235
Brazil, hypnotism in, 169
Bridgeman, case of Laura, 41, 277
Brown's, Dr. Haydn, case, 207
Brown-Séquard on inhibition, 15, 256 *n.*, 269
Brunton, Sir Lauder, on inhibition, 25, 258
  visits Nancy, 68
Bryan, Sir Douglas, quoted, 217, 224
Bryden, Dr., quoted, 67
Buchanan, Professor G., quoted, 69 *n.*
Bulimia, case of, 206
Burns treated by suggestion, 73
Buzzard, Dr., quoted, 71 *n.*

Cannabis indica compared with hypnotism, 141
Catalepsy, hypnotic, 61 *n.*, 160
Cataplexy, 162
Centres, brain, diagram of, 135
Charcot's stages of hypnotism, 59
quoted, 61, 145
Children, hypnotizability of, 63, 112
Chloroform and hypnotism compared, 118, 281
and suggestion, 83, 165, 233 *n.*
Christian science, 22 *n.*, 385
Chronic disease, hypnotism in, 67, 195 *n.*, 201
Church, attitude towards, 64 *n.*, 409
Circulation, effects of hypnotism on, 30 *n.*, 139, 289, 294
Clairvoyance, 42, 399 *n.*
Climacteric troubles, hypnotism in, 195
Clouston, Sir T., quoted, 29
Cobb, Dr. Ivo, quoted, 90
Coenthesis, or subjective consciousness, 283
Concentration, effects of mental, 42
Consciousness, conditions of, 277
in hypnosis, 58
Constipation cured by hypnotism, 163, 332 *n.*
Conversion, political, by hypnotism, 108, 396 *n.*
religious, 69 *n.*
Co-operation, patient's need of, 171, 181, 213 *n.*
Counter-suggestion, effect of, 86 *n.*, 227
Crichton-Browne, Sir J., quoted, 70, 385
Crichton-Miller's, Dr., practice, 235
Criminal use of hypnotism, 127, 392 *et seq.*
Cruise, Sir F., quoted, 11, 124, 207
Crystal-gazing and subconsciousness, 106

Dangers of hypnotism, 123 *n.*, 400
Death from imagination, 28
Deferred suggestion, 79
Definitions of hypnotism, 57
Degenerate children, hypnotic treatment for, 115
Dégerine, Professor, quoted, 81 *n.*, 124
Delbœuf's theory, 5 *n.*, 365
Delusion of hypnotic persecution, 121, 185
Demoniac obsession, 214, 388 *n.*
Dentistry, hypnotism in, 83
Details, technique, importance of, 157, 171, 226
Diabetes treated by hypnotism, 249, 332
Diagnosis, hypnotism as aid to, 71
Diarrhœa, chronic, cured by, 303
Dictation *versus* suggestion, 57, 70
Digestion, disorders of, hypnotism in, 68, 228
Dipsomania and drunkenness, 92, 235 *et seq.*
cases of, 310
drug cures of, 237
in women, 310
Disease caused by suggestion, 13, 26
Diseases treated, classification of, 173, 191
Dissociation of brain centres and hypnotism, 152
Distance, hypnotizing from a, 121, 399 *n.*
Doctors as patients, 155, 221, 340
Double brain, 101, 150
personality, 97 *et seq.*
Dreams, Freud's theory of, 48 *n.*
illness commencing in, 44, 82 *n.*
induced during hypnosis, 48 *n.*
Drunkards, after-history of, 238 *n.*
Drunkenness and idleness associated, 238
varieties of, 236
Duration of hypnotic sleep, 363
Dynamo-genesis *versus* inhibition, 283
Dysmenorrhœa, hypnotism in, 309

Echo voice, 273 *n.*
Ecstasy, religious, case of, 14, 35 *n.*
Education, hypnotism in, 110 *et seq.*, 192
Electricity and suggestion, 344
Electropathic belts act by faith, 15
Elliotson, Dr., and mesmerism, 126
Energy, storing of nerve, in hypnosis, 56
Enuresis nocturna cured by hypnotism, 305, 348
Epilepsy and hypnotism, 199 *et seq.*, 273
Equilibrium, nervous, established by hypnotism, 56, 282

Esdaile, Dr., and hypnotic anæsthesia, 169 *n.*
Estimation of time in hypnosis, 79
Eugenics and heredity, 205 *n.*
Euthanasia, hypnotism in, 226
Exaggeration of function in hypnosis, 133
Expectant attention a factor in hypnotism, 54, 131
Expecting too much of hypnotism, 117 *n.*, 174, 236
Experience and letters, 358

Failures and their causes, 117 *n.*, 161, 166 *n.*, 171
Faith as a factor in medicine, 35, 164 *n.*
Farez, Dr., quoted, 179, 216, 344
Fascination, method of, 177
Fear and fright, effects of, 20 *n.*, 27, 89, 202
Félida X——, case of, 101
Forel, Professor, practical experience of, 192
quoted, 12, 67, 95, 190, 233, 344
theory of, 139
Foster, Sir Michael, quoted, 277
Francis, Dr. A., quoted, 231, 332
Free-will and hypnotism, 248
Freud's theories, 48 *n.*, 82 *n.*, 89 *n.*
Function and mental states, 19, 275
Functional and organic disease compared, 71, 340

General practice, hypnotism in, 190, 217, 343 *n.*
Genito-urinary diseases, hypnotism in, 209
Goodhart, Sir J., quoted, 12
Gowers, Sir W., quoted, 26, 280, 384
Grazzini's, Dr., practice, 49

Habits, bad, treated by suggestion, 205
nerve, 262
Hack-Tuke, Dr., quoted, 27
Hæmorrhage by suggestion, 74
Hallucinations, hypnotic, 77-80
negative, 368
Hart, Mr. Ernest, and hypnotism, 201
Headache, case of traumatic, 302
Health and nervous equilibrium, 282
by repose, 59
Heart and inhibition, 253
disease, relief of, 200, 305
Heidenhain, Professor, quoted, 132, 273 *n.*
Heredity, bad, hypnotism, correction of, by, 113, 205
versus environment, 205 *n.*
Hibernation and hypnosis compared, 295
Highest cortical centres and hypnotism, 272
Hilger, Dr., quoted, 362
Hodgson, Dr. Richard, 103
Hospital and private practice, effects in, contrasted, 84, 171
Hugging one's disease, 212
Hughlings Jackson, Dr., quoted, 271
Hunter, John, and mesmerist, 181
Hurst, Dr. H. T., 18, 212, 231
Hyperæsthesia in hypnosis, 133
sensory, 42
Hyperidrosis, cases of, 231
Hypnogenic zones, 260 *n.*
Hypnotic will case, 402
Hypnotism by prescription, 225
dangers of, 123 *et seq.*
definitions of, 57
safeguards in, 121
stages of, 55
statistics of, 63, 173, 374
theories of, 96, 270 *et seq.*
Hypnotizability, 63 *et seq.*, 168
Hypochondriasis, 18, 87
Hypotaxy, 281
Hyslop, Dr., quoted, 181
Hysteria and hypnotism, 260 *n.*
cases treated, 44, 191
Hysterical joint, 341
Hystero-epilepsy, hypnotism in, 35

Idea, diseases dependent on, 20
Ideo-motor connections, 35
Idleness, cure of, by hypnotism, 111
Ilma Szandor, case of, 75
Imagination, influence of, in health and disease, 15 *et seq.*, 386
Imitation, effects of, 404
Imperative suggestion and Dr. Mercier, 70
Imposture in hypnosis, 155
Impotence cured by hypnotism, 191
Incubation or ancient temple sleep cures, 34 *n.*
Individuality and continuous memory, 278 *n.*
in hypnosis, 278 *n.*, 396 *n.*

Infantile paralysis, hypnotism in, 276
Inflammation controlled by suggestion, 74
Influence at a distance, 121, 399
of the hypnotist, 65 *n.*, 129
Influenza, hypnotism in, sequelæ of, 226
Inhibition in relation to hypnotism, 262 *et seq.*
Inhibitory centres, creation of, by hypnotism, 205
Insanity treated by hypnotism, 94, 184 *et seq.*
Insomnia, case of, 296
Insusceptibility to hypnotism, 172 *et seq.*
Intellectual capacity of hypnotic subjects, 64, 157 *n.*
Intelligence during hypnosis, 147
Interference, theory of, 262
Invalidism, professional, 212 *et seq.*
Ireland, Dr., quoted, 149, 144 *n.*
Italian researches, 187 *et seq.*

Jackson, Dr. Hughlings, quoted, 271, 274
James, Professor William, quoted, 69 *n.*
Janet's, Professor, cases of insanity, 214
Journals devoted to psychotherapy, 6

Keller, Helen, case of, 41
Kinglake quoted, 20 *n.*
Kingsbury's, Dr., practice, 224
King's evil, touching for, 30
Kleptomania cured by hypnotism, 115, 322
Krafft-Ebing, Professor von, practice of, 75

Latah, suggestibility in, 143
Lawyers, use of suggestion by, 405
Laziness, case of, 112
Left-handedness and hypnotic suggestion, 49
Legal aspect of hypnotism, 392
Lehmann's, Dr., theory of hypnotism, 138
Lethargy, hypnotic, 59, 278
Letters from army doctors at the front, 357, 358
Leucomaines and sleep, 268
Liébeault's classification, 371
discovery, 7
dispensary, 50 *et seq.*
theory, 282
Liégeois, Professor, of Nancy, 3, 400
Literature, 5
Locomotor ataxy, cases of, 194, 195 *n.*
Lombroso, Professor, quoted, 395
Long, Dr. Constance, quoted, 90, 219
Lourdes, miracles of, 69 *n.*, 391
Love troubles, hypnotic treatment in, 174, 340
Luys' hypnotizing mirror, 363
treatment by transfer, 380

Magnetism, animal, 372, 389 *n.*
'Magnetized cards,' experiment with, 361
Magnets, influence of, 384
Manners of patients, 219
Masturbation cured by hypnotism, 191, 312
Medical education needed in hypnotic practice, 119, 177
Mediums as affected by hypnotism, 278 *n.*, 399 *n.*
Melancholia and hypochondriasis, 86 *et seq.*, 183, 206
Memory affected by emotions, 145
and personality, 278 *n.*
in hypnosis, 138, 398
latent, 81, 104, 136
Ménière's disease, cured, 330
Menstruation, disorders of, cured by hypnotism, 66, 191
Mental and spiritual healing compared, 391
Mercier, Dr. C., quoted, 25, 70, 413 *n.*
Mesmeric control, delusion of, 121, 185, 403 *n.*
Mesmerism and hypnotism, 193
Metabolism and sleep, 269
Metallo-therapy and suggestion, 100
Methods of hypnotizing, 51, 169 *et seq.*
of public performers, 372
Midwifery, hypnotism in, 82, 224, 250
Mind cure, 16
Miracle cures, 29
Mischievous child, case of, 325
Mitral disease relieved, case of, 305
Moll, Dr. Albert, quoted, 80, 145 *n.*, 179
Mono-ideism and hypnotism, 133
Moral depravity, cure of cases of, 95, 313
insanity, cases of, 115
Morbid self-reproach, case of, 88

Morphia habit, treatment of, 92, 247
Myers, Dr. A. T., quoted, 122, 221
F. W. H., theory of, 107

N rays and animal magnetism, 389 *n.*
Nail-biting cured, 326
by hypnotism, 205
Nails and nutrition, 24, 276
Nancy, school of, 2, 61 *n.*
Negative hallucinations, 146
Neilson's, Colonel, practice, 220, 225 *n.*
Nerve energy, 56, 282
habit, 261
Nervous prostration cured, case of, 320
Neuralgia cured by hypnotism, 84, 212
Neurasthenia and hypochondriasis compared, 86 *n.*
cure of, 85, 229
Neuritis, peripheral, hypnotism in, 194
Neurological studies, Seale Hayne, 231
Neurons arrangement of, 342
New Zealand, hypnotism in, 216 *n.*
Nutrition in hypnosis, 285

Objections to hypnotism, 207, 220
Obscene obsessions treated by hypnotism, 186
Obsessent ideas, 207
Occupation neuroses, hypnotism in, 67
Olcott's, Colonel, cases in India, 32
Operations, cure by, *per se*, 17
hypnotism in surgical, 83
Ovarian troubles, hypnotism in, 249, 337

Pain as a danger signal, 127
Panacea, hypnotism as a, 337
Paralysis caused by suggestion, 146
treated by hypnotism, 71 *n.*, 191
Perjury and hypnotic suggestion, 404
Permanence of results, 116, 164
Personality, change of, under hypnosis, 97
double, cases of, 103
of hypnotist, 219
Perversity of some patients, 166 *n.*, 212
Phantom limb, cases of, 341
Physiological rest in hypnosis, 85
Physiology of hypnotism, 137 *et seq.*
Pill-plane patients, 165
Pitres, Professor, quoted, 35 *n.*, 260 *n.*
Podmore, Mr. Frank, and suggestion, 27 *n.*
Possession, demoniac, 214, 389 *n.*
Post-hypnotic suggestion, 78, 369
Precautions in using hypnotism, 128
Prejudice against hypnotism, 210 *n.*
Prescription, hypnotism by, 225
Preyer's, Professor, theory of sleep, 138, 290
Prince's, Dr. Morton, case of multiple personality, 106
Prolonged hypnosis, treatment by, 198
Proportion of persons hypnotizable, 62, 175
Protection of subjects, 129, 220
Pruritus cured by hypnotism, 208, 332
Psychical Research Society, 82 *n.*
states and organic functions, 37 *n.*
Psycho-analysis, treatment by, 213
Public exhibitions of hypnotism, dangers of, 123
Puerperal insanity cured by hypnotism, 327

Quackery and suggestion, 209 *n.*
Quack's study of human nature, 346
Qualifications of hypnotist, 34, 171

Racial susceptibility, 168
Railway spine, 70
Rapport, hypnotic, 55, 129 *n.*
Reflexes, action of hypnotism in, 289
Reformation, hypnotism as an aid in, 95, 115
Relation, life of, 365
Religion and medicine, 409
Religious leaders, healing by, 32
Remorse, hypnotism in cases of morbid, 88
Repose, health by, 158
Resistance to hypnotism, 165, 182
to suggestion, 182
Respiration in hypnosis, 291
Reynolds, Sir J. Russell, quoted, 19
Rheumatism, cases of, 210, 307
influenced by suggestion, 209

Richet, Professor, quoted, 108, 143 *n.*
Russia, hypnotism in, 245

Safeguarding patients and doctors, 128
Salvation Army cures, 32, 300 *n.*
Savill, Dr. T. D., quoted, 24, 84, 86 *n.*, 227
Schrenk-Nozing's, Dr. von, experiments with hashish, 142
Sciatica, cure of, by hypnotism, 306
Scott's, Dr. Gilbert, case of stigmatization, 77 *n.*
Sea-sickness prevented by hypnotic suggestion, 216
Senses, abnormal acuteness of, in hypnosis, 42
Sexual perversion, hypnotism for cure of, 312
Sham operations, morality of, 345
Shell-shock, 357, 358
Shock, ailments from hypnotism in, 70
Simulation and hypnotism, 155
Sleep and hypnosis compared, 55, 143
changed into hypnosis, 47
Sleeplessness, cases of, cured, 86, 221, 296
Sneezing, paroxysmal, treated by hypnotism, 304
Somatic reactions in hypnosis, 273 *n.*, 288
Somnambulism, hypnotic, 65
spontaneous, 43
Sphygmographic tracings in hypnotism, 73, 291
Spinal irritation, hypnotism in, 70
Spiritual and mental healing, committee of inquiry as to, 391
healing and suggestion, 32, 34 *n.*, 300 *n.*
Spiritualism and hypnotism not connected, 7
Stage-fright cured by hypnotism, 91
Stammering, hypnotism in, 203 *et seq.*
Statistics, hypnotic, 62, 173
Stigmata, 77 *n.*
Students should be taught in medical schools, 192
Sturges, Dr. Russell, quoted, 87
Subliminal consciousness, 214
Suggestions and false witness, 404
during natural sleep, 179
indirect treatment by, 13
in surgical operations, 215, 225
Suggestions without hypnotism, 149
Surgery, hypnotism in, 216, 225
Surprise, hypnotism by, 146
Sympathetic system and hypnotism, 72

Tamburini, Professor, quoted, 187, 289, 291
Temperament affected by hypnotism, 97, 395
Temperature affected by hypnotism, 75
Tension, nervous, in disease, 157
Testimonials, fallacious, 205 *n.*
Tests of hypnotizability, 162, 362
Theories regarding hypnotism, 137 *et seq.*
Thought-reading and muscle-reading, 35
Thought transference and hypnotism, 185, 399 *n.*
Tic-douloureux, case of, 304
Tickling and inhibition, 264
Time, appreciation of, in hypnosis, 79
Tobacco habit, cure of, 93
Tokarsky's, Dr., practice, 245
Torticollis, cure of, by hypnotism, 301
Touch, healing by royal, 33 *n.*
Transfer, treatment by, 204, 380, 385

Unacknowledged use of hypnotic suggestion in practice, 69, 222

Van Eeden, practice, 261
quoted, 249
Van Renterghem, Dr., practice, 261
quoted, 226
Vasomotor system, effects of hypnotism on, 72, 139, 160, 291
Vincent, Dr. Ralph, quoted, 42, 112
Vital reaction, test for, 159 *n.*
Vittoz's, Dr., re-education treatment, 214 *n.*
Vivi-sepulture, case of, 28
Vogt, Dr. Oscar, quoted, 140
Voisin's, Dr. Auguste, practice, 94, 178, 183
Dr. Jules, quoted, 94
Vomiting caused by suggestion, 16, 27, 73 *n.*
cured by suggestion, 45, 191

Walker, Dr. Jane, quoted, 249
War, recent experiences during the Great, 356 *et seq.*
Warmth by auto-suggestion, 291
local, suggested in hypnosis, 52, 159 *n.*
Warts cured by charms, 18
by hypnotism, 18 *n.*
Washing, mania for, cured by suggestion, 328
Waste products, effects of, 327
Weir-Mitchell treatment, abuse of, 69, 125 *n.*
combined with hypnotism, 69
Wetterstrand's, Dr., practice, 169, 248
Wilkes, Sir Samuel, quoted, 24
Wilson's, Dr. Albert, case of multiple personality, 104
Wingfield, Dr. Hugh, quoted, 111, 157 *n.*, 204
Work, need of, in alcoholism and other diseases, 238
Writer's cramp cured by hypnotism, 297

Yeo, Dr. Gerald, on hypnotization of animals, 379
theory of hypnotism, 137

Zonar epilepsy, 260
Zones, hypnogenic, 260 *n.*

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